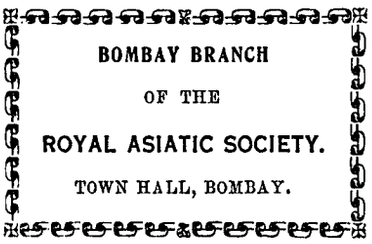
Report on the administration

of the

Imperial Customs Department

1867-68 to 1869-70

00134347



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REPORT

ON

THE ADMINISTRATION

OF THE

Imperial Customs Department,

FOR THE

134347

OFFICIAL YEAR

1867-68.

CALCUTTA:
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REPORT

ON

THE ADMINISTRATION

OF THE

IMPERIAL CUSTOMS DEPARTMENT

FOR THE

OFFICIAL YEAR 1867-68.

General Review.

INTRODUCTION.

THE IMPERIAL LINE,

Neglecting Sindh, the Imperial Customs' Line may be described as separating British Continental India from Rajpootana, Central and Peninsular India.

its general direction

2. In connection with a Punjab Local Line, which joins it at Fazilka[1] on the Sutlege, the Imperial Customs' Line closely skirts the whole northern and eastern frontiers of Rajpootana and Independent Central India, from Mooltan, on the Chenab, to Boorhanpore, on the Taptee, on the borders of Khandeish. Thence it turns eastwards, runs right across the peninsula to near the Bay of Bengal, terminating at present close to the borders of Chota Nagpore and the Tributary Mehals.

and exact course.

3. Its course is through Sirsa, Hissar, Hansie, near (but south and west of) Rohtuk, Goorgaon, Muttra, and Agra, through Jaloun, Jhansie, Saugor, Hoshungabad, and Khundwa, to Boorhanpore; and thence, hugging the northern boundary of the Berars, to Chanda on the Wurda, Raipore, Sumbulpore, and Samasinga. Exclusive of the Indus, Mooltan, and[2] Berar Lines, it has a length of 1,817 miles, and is watched and guarded by 10,832 officers and men. It is divided into 10 divisions, of which 3 (Sirsa, Hansie, and Delhi) are subordinate to the Punjab Government, 3 (Muttra, Agra, and Jhansie) to that of the North-Western Provinces, and 4 (Saugor, Hoshungabad, Nagpore, and Raipore) to that of the Central Provinces.

Length and divisions.

The provinces it isolates.

4. So far as communication by land is concerned, it practically separates from the rest of India, the greater part of the Punjab (including Putteealla and other Native states), the North-Western Provinces, Oudh, the major portion of the Central Provinces, Bundelkund, and the whole of the territories subject to the Government of Bengal.

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(1) About 40 miles south of Ferozepore.

(2) The Berar Line, which is also under charge of this Department, has a length of 334 miles, and at the present moment, a preventive force of 1,454 officers and men. Its object is to realize a tax on all the salt consumed within the Hyderabad Assigned Districts, and so provide funds to meet the Educational and Public Works requirements of Berar. The Mooltan and Indus Lines are at present under the various Local Officers; but there are grounds for believing it desirable to unite these Lines with each other and with the Imperial Line.

Their area and population.

5. An area of five hundred thousand square miles[3] and a population of one hundred and thirty millions, may be approximately assigned to this vast tract; and to *aid* the realization of the tax on the *whole* of the salt consumed within this tract, by levying an import duty along its entire land frontier, is the principal object of the Imperial Customs' Line.

Primary object of the Line. *Realization of an import duty on salt.*

Secondary object. *Realization of an export duty on sugar.*

6. Advantage is taken of the existence of this Line to levy a light duty on all sugar produced within this tract, and exported thence by land, either to foreign states, or to portions of British territory, which, lying outside the Line, contribute less to the Imperial Funds, in the shape of salt tax, than those portions which lie within it.

SUPPLY OF SALT TO THE COUNTRY IN REAR OF THE LINE.

7. Duty is paid on by far the greater portion of the salt consumed by the 130 millions resident within the Line, and it is with this duty-paying portion that we are primarily concerned, but as I shall later notice, a certain amount of salt, even now, entirely escapes taxation.

Duty-paying salt *enters on the North-West Frontier*: *across the Line*,

8. Duty-paying salt enters 1st, on the north-west boundary of the tract, 2nd, across the Line, 3rd, on the south-eastern boundary. That which enters by the north-west is rock salt, from the Pindadun Khan and Kalabagh mines[a] on which the Punjab Government levy a duty of Rs. 3 per maund. That which crosses the Line is chiefly manufactured *either* at Phullowdee, Puchbuddra[b] Deedwana, in Jodhpore; at the Sambhur Lake (which is partly in Jodhpore, and partly in Jaipore); at Ramaisur[c] near Ajmere; at Sooltanpore and Noh in our own territories; at Koombher, Deeg, Bhurtpore, and Roopbas, in the Bhurtpore state; at Burragur, near Patree, in Guzerat; and at Ellichpoora and Oomeraotee in Berar[f]; on all of which this Department levies a duty of Rs. 3 per maund; *or*, on the Bombay Coast[g] (chiefly in the immediate neighbourhood of Bombay itself) and Madras Coast[h] (for the most part in the neighbourhood of Ganjam), on both which latter kinds, having

---

(3)

Territory.	Area in Square Miles.	Population in millions.	Remarks.
Bengal	2,20,000	*60	* *Vide* note page
North-Western Provinces	83,000	31	2 of my paper
Punjab (portion inside Line)	70,000	12	on the Madras
Oudh	19,000	9	salt question.
Central Provinces (portion inside Line) ...	80,000	7	
Independent Bundelkund, Rampore, Putteealla, &c.	30,000	10	
Total ...	5,02,000	1,29,000,000	

(a) Commonly called "*Lahoree*;" and also "*Sendha*" in the north. In Bengal this latter name is applied to Muscat rock salt.

(b) In Central India called "*Kansia*" salt.

(c) Known as "*Dobra*" salt.

(d) Known as "*Balumbha*" salt, sub-divided according to process of manufacture, as "*Puneah*," "*Kuteela*," *and* "*Mutya*."

(e) Always called "*Salumbha*" salt.

(f) Commonly called "*Bhooshkie*" salt.

(g) Known as "*Kokan*."

(h) Usually known as "*Bunwar*."

already[4] paid Rs. 1-8 per maund at the works, we levy only an equal amount, so as to bring the total duty up to the Rs. 3 paid by other salts.

and on the South-Eastern Frontier.

9. The salt which enters by the south-eastern frontier, principally at Calcutta, consists, 1st, of salt manufactured[5] on the coast[i] by private individuals; 2ndly, of salt[6] sold by Government[j], and 3rdly, of salt imported by sea, the major portion, Cheshire, "stove dried" and "butter" from Liverpool[k], but a certain amount also from Jeddah[7] [l] Muscat[m] Bombay, Madras, France, and Ceylon; on the whole of this salt a duty of Rs. 3-4 is levied by the Bengal Government.

Salt that escapes duty.

10. Besides this duty-paying salt, a certain amount that has not paid duty is consumed within the area under consideration; some of this comes in from outside, and some is manufactured inside the Line, either in Native states, or illicitly within our own territories.

Some rounds the eastern end of the Line.

11. As regards the first the Imperial Line runs from Sumbulpore northwards along the Ranchee road, and instead of extending right to the sea coast terminates on the Bamrâ frontier, thus leaving a gap, *hiatus valde deflendus!* A good deal of illicitly made salt from somewhere in the neighbourhood of the Chilka[8] Lake, and quantities of low-dutied Madras salt from Ganjam, Ichapore, &c., find their way through this gap into the tributary mehals, and thence, chiefly through Bamrâ, into Chota Nagpore, and even, occasionally, into portions of the Central Provinces, in rear of the Line; *at least* a lakh of maunds[9] a year

---

(4) Or, at any rate, is supposed to have so paid. My own enquiries on the spot (*vide* Appendix III, Central Provinces, paras. 9 and 10) led me to believe that much of the salt loaded by rail at Kullian is smuggled thither by boats from the Oorun, Panwell, and other works without ever paying any duty there. Proposals to equalize the duty paid in Madras and Bombay with that levied in Upper India have always included the abolition of the cross Line from Boorhanpore eastward, but before this can be safely ventured on, a most material improvement on the preventive system in force at the Bombay salt works will be essentially necessary, and this is freely admitted by the Bombay Customs Officers themselves; at present, gauged by the standard of this Department, their system is imperfect, and their Establishment very inadequate.

(5) This is at present entirely insignificant in quantity, but the Bengal Authorities are, I believe, encouraging the manufacture, and as very fair salt made, apparently, under nearly similar conditions at Bombay, can be sold at a profit at the works at 1 anna a maund, there seems no reason why, with proper arrangements, and *facilities for carriage*, Bengal Coast salt should not beat all imported out of the market, especially if it be borne in mind that Cheshire salt, which now composes $\frac{3}{4}$ths of the Bengal imports, can *never*, under the most favorable conditions of freight, &c., be landed much under 8 annas a maund, *averages* above 12 annas a maund, and not uncommonly exceeds 1 Rupee per maund.

(6) This salt is the remains of the stock that the Bengal Government had in hand when they discontinued the manufacture in April 1863. Before very long this source will be exhausted.

(i) (j) Known as "*Kurkutch*" and "*Pungah*," according as it is solar evaporation, or Boiler salt.

(7) These places are arranged in order according to the extent of importation. In quality the different salts rank 1*st*, Liverpool, 2*nd*, privately made and Government Pungah or Boiler salt, 3*rd*, Jeddah (includes all salt from the Red Sea), 4*th*, French, 5*th*, Government Kurkutch or solar evaporation salt, 6*th*, Muscat (rock and grain include all salts from the Persian Gulf), 7*th*, Ceylon, 8*th*, Madras, 9*th*, Bombay.

(k) Called by the people "*Naferphoolee*," (l) known as "*Adjoodia suffree*," (m) of two kinds, rock and grain; the former called "*Muscat Dela*" or "*Sendha*," the latter "*Muscat Chor*."

(8) I have not yet examined this locality myself; but the Bengal Authorities, I believe, are aware that this is the case.

(9) The Bengal Government have in contemplation a preventive Line along the Madras Frontier, but this, even if laid, will be ineffective; it will still leave a gap, and its only effect will be to divert the course of the low-dutied Madras salt, which will then run up through Boad and Radakole, while the illicit manufacture at the Chilka Lake (which those who know the locality inform me is difficult to control) will remain in *statu quo*. There can be little doubt that if the Madras duty is not to be equalized with ours, the Imperial Line must be prolonged from Sumbulpore, either down the main road, or along the Mahanuddy, to Cuttack, and thence to the sea, at or near Juggernauth. I have demi-officially, by letter and in person, laid this matter before the Lieutenant Governor of Bengal, but I believe that no decision has yet been come to on the subject (*vide* further para. 132).

(it is locally estimated at a much higher figure) thus passes free, or half free of duty, into Continental India, (*vide* Appendix III, Central Provinces' Sectional Review, *paras.* 28, 29, 42, and *this Review, para.* 132).

Some is brought in from Thibet.

12. The population of Gurhwal and Kumaon, &c., is included in our total of 130 millions, but these hill regions, as I have pointed out on a former occasion, are chiefly supplied with Thibet [10] salt, which even finds its way to bazars at the foot of the Hills. Judging from my own enquiries in Kumaon, from the salt-carriers themselves, nearly 100 of whom I met in the course of a single day, and from recent enquiries that we have had instituted in Gurhwal, the annual import of Thibet salt into British territories cannot fall far short of, and probably exceeds, ½ a lakh of maunds.

A little is smuggled across the Line.

13. Smugglers have, as usual, been active along the Line, throughout the year, and have, of course, introduced a certain amount of salt without payment of duty. Throughout the Punjab and North-Western Provinces' Sections, if we exclude the Jhansie Division, there is reason to believe that very few attempts at smuggling have proved successful. South of the Jumna, in the Jhansie and Saugor Divisions, there has always been a good deal of petty smuggling, and here, though seizures have been

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(10) This Thibet salt somewhat resembles the inferior descriptions of Sambhur. It is fairly pure, containing some 93 per cent. of chloride of sodium. In a note, page 4, of my review of Mr. Braddon's report on the Oudh salt question, I remarked that Nepal was probably supplied with this Thibet salt. The following extracts from a letter just received from a gentleman at Khatmandoo prove that this is really the case, and furnish some interesting particulars about the salt:—

"Nepal proper, or the hills of which the country is composed, and the valley of Khatmandoo, is supplied entirely with salt from Thibet. The taxed salt from British territory is not imported here at all, and is looked upon with disfavour." * * * *

"The importations from Thibet are more than sufficient for the wants of the people, and the price at which it sells in the bazar here (Khatmandoo) is 6½ seers per Rupee. * * The Nepalese traders in the Thibet Frontier get the salt in barter for rice and choora. The salt is anhydrous, being prepared from salt marshes, which are miles in extent. There is always a small proportion of borax in combination. During the late Thibet war, when the supply of this salt was checked, the British taxed salt, and some manufactured in the low lands, was imported, but (whether justly or not) a cutaneous eruption, prevalent soon after, was imputed to this salt from the plains, which has ever since been held in disfavour. In the Eastern Terai, the Balasore (?) salt is almost universally used. The proper course for importation is *viâ* Burmo Deomundee, a Nepalese Chowkie on the eastern bank of the river Kalee. The Nepal Government has Customs Chowkies at Burmo Deomundee, Dhukna Bagh, Golaghat, Bankee, &c., in the territory ceded to it by the British Government for services rendered during the disturbances of 1857. The Nepalese Customs Guards are very efficient as a rule. A very small quantity of Lahoree salt is used in Nepal, and only in times of mourning, when the Thibetan salt is forbidden. The price of the rock salt is 3 tolas for 1 pie, or about 16 Rupees per maund. The price of Eastern salt in the Terai adjoining Purmah is about 4 Rupees per maund (?)."

In connection with this I may add that independent and careful enquiries on the spot have given the following approximate statistics as to the imports of British duty paid salt into the Nepalese Terai:—

	1866-67.	1867-68.
WESTERN SALT.	Mds.	Mds.
From Fyzabad, *viâ* Gonda	12,000	15,500
Viâ Byramghat, across the Gogra	20,000	20,000
	32,000	35,500
EASTERN SALT.		
By the Gogra from Nawabgunj, &c.	20,000	25,000
By the Raptee, *viâ* Bithueella, in Bustee, &c. ...	15,000	20,000
	35,000	45,000
TOTAL ...	67,000	80,500

numerous, escapes, I suspect, have been nearly equally so. Lastly, in Raipore, where the Line is very weak, the peons' posts being, in places, from five to six miles apart, besides petty smuggling, cases *have* occurred in which Bunjarahs have made good their passage with considerable bodies of laden cattle. The whole question of smuggling will be discussed further on; here I shall only say that, even including Raipore, it may be safely asserted that the total quantity of salt, smuggled across the whole 1,800 miles of Line, during 1867-68, did not exceed 25,000 maunds.

14. Some[11] smuggling, of course, goes on on the Bengal Coast. *and some on the Bengal Coast.*

15. Next we have salt manufactured inside the Line. First let me notice that produced in Native states. Rewah turns out a considerable quantity, and not only mainly supplies its own population, but also to some extent that of the Barah, Khyragurh and other British Pergunnahs, and of portions of the neighbouring Bundelkund principalities. Reliable statistics are wanting, but despite the higher estimates often formed, I believe we shall not be far wrong in assuming that the total out-turn does not much exceed ¾ of a lakh of maunds per annum. *Some is manufactured inside the Line.* *In Rewah.*

16. In Rampore, there are a number of saltpetre works at which some fair edible salt is also produced. Here, again, accurate returns are not available, but from the number and extent of the works reported to exist, I conclude that the annual salt out-turn is not likely to exceed 10,000 maunds. *In Rampore.*

17. The population of the Kangra, Simla, and portions of the Goordaspore and Hooshyarpore Districts, draw their supplies of salt largely from the Mundee principality, and this salt, too, pays us no duty. *In Mundee.*

18. Again, in the Punjab, a very considerable quantity of earth-salt is made, and consumed duty free, but exactly what proportion thereof is produced in British and Native territories, respectively, we are not in a position to determine. Not only is salt educed in the manufacture of saltpetre* in many places in the Delhi and Hissar Divisions, but it is similarly manufactured, to a much greater extent, in Puteealla, Jheendh,† and other Native states, whose territories are so intermingled with our own, as to render entirely efficient preventive measures difficult. Much[12] might, however, be done. At *In the Punjab.*

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(11) I have not attempted to estimate closely the quantity annually smuggled up the innumerable rivers and creeks that run into the sea between the Hooghly and Chittagong. A gentleman, long resident in the Soonderbuns, assured me that it was enormous; but the Bengal Authorities are, I believe, on the whole, fairly satisfied with the efficiency of their preventive establishments, extraordinary as the *difficulties* are with which these have to contend. Probably even with the very best arrangements, between 2 and 3 lakhs of maunds thus yearly evade the payment of duty.

* In July last, one of our Assistant Patrols seized 24½ maunds in a factory in Goorgaon. I am happy to say that the Revenue Commissioner ordered the factory to be demolished, and the salt to be confiscated, while the owner was fined Rs. 200. But the seizure was 18 miles away from our Line and the merest accident. A hundred other factories may be doing the same; we have neither jurisdiction, nor, if we had, establishment to look after them, (*vide* para 133).

† The Jheend salt is reported to find its way in considerable quantities to Umballa, Kurnal, Shamlee, &c.

(12) A lengthened correspondence on this subject took place in 1865-66 and 1867 between the Commissioner of Customs, Financial Commissioner and Government of Punjab. The matter was finally dropped under the idea that the whole of the salt was *Kharee Non*, a non-edible substance, not likely to interfere with our duty-paying salt. My own enquiries, during the past season, have led me to believe 1*st*, that a vast proportion of the so-called *Kharee Non*, instead of being, as the name imports, Glauber Salts, or Sulphate of Soda, is more or less pure Chloride of Sodium; and 2*nd*, that besides the so-called *Kharee Non* there is in the market, a small grained earth-salt, specimens of which I procured at Kalka, Kurnaul, Sirhind, &c., very different to anything that crosses the Line, and which there is, therefore, strong reason to believe is a local product. As regards the *Kharee Non*, one sample procured at Sirsa contained 80, and one from Umballa 90 per cent. of Chloride of Sodium. I think that careful enquiries should be made throughout the Cis-Sutlej States, by an experienced Officer of our Internal Department, specially deputed for the purpose.

present there is practically no check on this illicit manufacture, which I am confident I am underrating, when I assert that it affects our annual imports to the extent of at least a lakh of maunds.

Chiefly in the North-Western Provinces and Oudh.

19. Of salt unquestionably illicitly made within our own territories there is a very considerable amount. The North-Western Provinces and Oudh contain thousands on thousands of square miles of country closely sprinkled over with saline patches, of which, though none of them are rich enough to afford singly any great yield, the aggregate out-turn would be enormous. Previous to the establishment of our Internal Department, which has for its first object the repression[13] of illicit manufacture, this latter affected our imports at least to the extent of 10 lakhs of maunds yearly. Ill-paid as our establishment is, and room as there still is for improvement[14] in its organization, it may be safely asserted that the entire illicit manufacture in Oudh and the North-West Provinces during the past official year has not exceeded 2 lakhs of maunds.

and in Behar.

20. In Bengal, again, chiefly in the Mozufferpore and Sarun districts of Behar, Pukwa salt is extensively illicitly manufactured. The great salt dealers in Patna assured me that the injury to their trade alone by this manufacture was not less than 2 lakhs of maunds a year, and the total out-turn and consequent injury to our revenue is estimated at a much higher figure. There is unfortunately at present no real[15] check on this illicit trade.

21. Imperfect as this summary possibly still is of the sources whence the populations of British Continental India draw their supplies of salt, it will yet enable us to form some estimate

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(13) It has often been suggested to permit the manufacture and tax the produce. Widely diffused, and, comparatively speaking, poor as these salt sources, as a rule, are, no establishment that our revenue could support would suffice, were the manufacture *generally* permitted to ensure the realization of duty upon even the major portion of the out-turn. Moreover, any expense so incurred would be an additional charge against revenue, not compensated for by any saving elsewhere, since even if we permit internal manufacture, we must still maintain the Line *in statu quo*, to prevent Rajpootana salt (which would otherwise drive our earth-salts altogether out of the market) getting in free, as well as to realize our duty on the same. A comparatively small establishment is, however, sufficient to prevent the manufacture, when altogether prohibited, assuming any very important dimensions. It is comparatively so easy to prevent a man's making any salt, so difficult to make sure if you once permit the manufacture, that he duly pays duty on all he makes. The former needs only a hurried visit to each saline tract two or three times in a month (for solar evaporation pans cannot be concealed). The latter demands an almost hourly watch over each pan by some well paid and trustworthy official, or a series of cordons (necessarily, if effective, interfering materially with the general traffic of the country) round each cluster of petty, so-called, works, of which there were once 15,000 scattered over an area of some 60,000 square miles. Whether it might not be possible to fix on some few localities from which really considerable quantities of *good* salt could be turned out at light cost, within narrow and easily guarded limits, is the only question that still seems an open one, but all my enquiries have hitherto led to the conclusion that no sufficiently concentrated sources, possessing the requisite natural advantages, exist either in Oudh or the North-Western Provinces.

(14) The Internal Department employs about 1,100 officers and men, costs Government about 2 lakhs a year, and saves it about 24. When the force is placed, as it is to be hoped it *soon* may, on the improved footing, lately recommended by the various Local Administrations, even better results may be expected.

(15) The Bengal Government formerly declined to adopt measures similar to those in force in Oudh and the North-West Provinces under the impression that these might injure the saltpetre trade. As this trade has now declined as sadly in Behar as with us, it is possible that they may now reconsider the question. Looking merely to the character of the country, its area and the number of works said to exist, it seems probable that an efficient establishment, that might be expected to save Government from 5 to 6 lakhs, might be maintained for about half a lakh. A careful examination of the whole country would be necessary before any thing more certain could be stated. I submitted demi-officially, and subsequently, at his request, officially, to His Honor the Lieutenant Governor of Bengal a proposition to depute one or two experienced Officers to Behar to make the necessary enquiries, and he has it, I believe, still under consideration.

of the total amount consumed by them in a year. Taking the past official year we find that during 1867-68—

Total supply from all these sources.

	Maunds.
The salt mines of the Punjab supplied them with about ...	12,00,000
While there crossed, I believe	37,30,000
And there entered by the S. E. Frontier about	79,00,000
To which added non-duty paying, illicitly manufactured, and smuggled salts above enumerated, at least	10,00,000
Giving a total of mds. ...	1,38,30,000

In 1867-68 *about* 1,38,30,000 *maunds :*

and a consumption per head of the whole 130 millions of the population of some $4\frac{1}{4}$ seers, or $8\frac{1}{2}$lbs. of salt, 92·8 per cent. of which has paid on an average a duty of over Rs. 3-2 per maund. This is the minimum, and it is highly probable[16] that I have thus somewhat understated the consumption[17], by estimating the untaxed supplies at too low, and the population at too high a figure.

and consumption at the lowest estimate $8\frac{1}{2}$ *lbs. per head.*

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[16] It will be borne in mind, 1st, that I have taken the lowest possible estimate of non-duty-paying salt; 2nd, that I have taken the highest estimate of population, having added 20 millions to the commonly received number of the population of Bengal. If this latter be taken at its customary estimate of 40 millions, the consumption exceeds 5 seers.

[17] Contrast this with the consumption where the duty is only Rs. 1-8. Here, after deducting the quantity that enters Continental India, there remains about 94 lakhs of maunds of Madras and Bombay salts, consumed in Peninsular and Central India by a population of 60 millions. This population is thus estimated :—

Madras Presidency	27,000,000
Bombay, excluding Sindh	11,000,000
Central Provinces, outside Line	2,200,000
Berar...	2,500,000
Nizam's Territories	10,800,000
Mysore	4,500,000
Other Native States	2,000,000
TOTAL ...	60,000,000

It is not generally known that much of the south-west portion of the Central India Agency, Dhar, Rutlam, &c., is supplied by salt manufactured in the Bombay Presidency, and not in Rajpootana. Colonel Trevor, Secretary to Government, Bombay Railway Department, was the first to point this out to me, as the result of his own personal observations, and I have since verified his remarks. To return, this gives a consumption of $6\frac{1}{4}$ seers, or $12\frac{1}{2}$ lbs., a head for the southern populations. I have not included any Berar and Mysore earth-salts in the above total, because we have at present no really reliable information on the subject; pending the result of enquiries from the Local Authorities, I may say that the Berar salt is said to fall short of half a lakh of maunds, and the Mysore to amount to nearly one and a half lakhs. If this is correct, and allowance be accordingly made, the consumption will reach to nearly $6\frac{1}{2}$ seers, or 13lbs. a head. Much additional information, and, doubtless, not a few corrections, will be necessary before this comparison can be accepted as conclusive; but even now, it may, to a certain extent, serve us as a guide. Making every allowance for the much greater wealth of the masses of Southern India and the extensive use of salt in fish curing along the coasts (to which there is no corresponding industrial use in Continental India), it is still probable that something like half the difference in the rates of consumption above deduced, is due to the difference in the rates of duty; and we are led to conclude, as the most reliable approximation which we are at present in a position to make, that by reducing our duty from an average of Rs. 3-2 to Rs. 1-8, we might hope to increase our consumption by one seer a head, or nearly one-fourth. This may probably be disputed, and is more than might, *a priori*, have been expected even where the duty is Rs. 3-4 per maund, the cost of the necessary supply of salt still forms too small a proportion of even the poorest man's expenses, to reduce his consumption, below what he finds agreeable to his palate, and in practise necessary for his health, and it may be argued that even where salt is free of *all* duty (and *a fortiori*, where a duty of Rs. 1-8 is levied) no man will eat more than this. "*Personal consumption of a necessary like salt,*" it may be said, "*varies little with price, until at least this latter far exceeds any thing that has ever yet been heard of in India. It is in its application to industrial purposes, that price has in Europe so materially influenced the consumption of salt, and here in India, alike where salt is relatively excessively cheap (say 4 annas a maund, or about 14 lbs. for 1d.), and where it is relatively extraordinarily dear (say Rs. 8 a maund, or 2½d. a lb., its industrial uses, neglecting the fish salted on the sea coast, are nil.*" I admit the abstract validity of the argument, but the most careful computations that I have been able to make, and these, doubtless, faulty as they still are, can at least be shown to approximate closer to accuracy, than any that have preceded them—lead to the conclusion that our comparatively high rate of duty in Continental India, has checked consumption by nearly one-fifth, and that the reduction of the duty to the Southern Indian rate might consequently, so far as we are now in a position to judge, be expected to raise our present consumption by nearly one-fourth. Of course, if my estimate of the Bengal population is incorrect, the check has been somewhat less than one-sixth, and the probable increase would then be less than one-fifth. I foresee that objections will be raised; that it will be contended that I have attributed too large a share of the difference in the rates of consumption to the difference in the rates of duty.

THE WHOLE TRACT THUS SUPPLIED VIRTUALLY ONE:

22. Intersected as this vast area even now is, by railroads, which carry salt for 100 miles at the rate of 2 annas 1 pie per maund, by navigable rivers, and, in many places, excellent roads, a rise or fall in the price of any one of the different kinds of salt consumed within it, whether due to variations of season, or fluctuations in the rates of labor, carriage, or freight, affects, more or less, the demand for all other kinds, modifies, more or less, the area of their distribution, and influences, more or less, the amount of revenue realized, severally, by the Punjab, Imperial Line, and Bengal Salt Customs.

and the three Departments, the Punjab Imperial Line and Bengal Salt Customs charged with the collection of the tax therein mutually dependent on each other.

23. These three Departments are mutually dependent on each other to a degree that, with the ever-increasing facilities of communication, it becomes daily more and more necessary to recognize. Without the Punjab and Bengal preventive establishments, our Line collections would dwindle sadly; and similarly, if our Line were removed, their revenue would equally suffer. It is, it seems to me, *essentially* necessary to any right apprehension of its position, to realize that the Imperial Customs is at present only one of three separate and[18] independent departments (which heretofore have but little concerned themselves with each other), all of whose labors tend to one common result, which no one of them can singly materially control, or indeed, as a rule, entirely explain. A variety of complex causes, some local, some general, combine to produce changes in the course of trade, and fluctuations in the revenue, where each is concerned, but no one of them can singly possess the information necessary

Singly unable, materially, to control results:

First, it will be said that sufficient allowance has not been made for the large quantities of salt wasted in fish curing. I admit that I have made very little allowance for, this, 1st because data for estimating the amount are absolutely wanting, and 2nd, because from what I have seen of the system in force in the Bombay works, I have grave doubts as to how much of the salt thus used ever pays duty, or consequently is included in our calculations. The great objection, however, will be that if the apparently larger consumption in the south be really due to the proportionally greater cheapness, then since such cheapness is due fully more to causes other and distinct from the lesser rate of duty than to this latter, I am not justified in assigning to this lesser rate of duty, half of the difference observed in the rate of consumption. It will be argued that cheapness is relative, as well as actual, and that, practically, whether you double a man's income or halve the price of what he wishes to purchase with it, the result is the same; that, on an average, the income of the masses in both Bombay and Madras is at least double of that of the masses in Continental India, and that, therefore, independent of the difference of duty, supposing this and the cost of the article itself, the same at both places, and all other things equal, salt would still be virtually twice as cheap to the richer southern, as to the poorer northern population. That, further facilities of manufacture and proximity to the sources of supply also combine to cheapen salt in the south, and that, consequently, it is incorrect to attribute to the difference in the rate of duty, half of the difference in consumption due to greater cheapness, when probably three-fifths* of the difference in the relative price (and it is this, of course, not actual price, which determines consumption) is due to other causes. Logically, I believe this to be correct, but, in practice, I think that *relative* differences in price do *not* affect, in a case like this, consumption as much as *actual* differences; A and B each having Rs. 100 a year, and salt being at Rs. 3, I do *not* think it will increase A's consumption as much to raise his income to Rs. 200, leaving the price of salt *in statu quo*, but allowing other food staples to rise, as it would B's to lower the price to Re. 1-8, leaving *his* income and other food staples unchanged. It is a very intricate question, too long to discuss here in detail, but after thinking it out, with all the materials at present available before me, I have arrived at the conviction (subject to modification on subsequent corrections to premises being found necessary) that very nearly, if not fully, half of the difference observed in the rates of consumption is due to the difference in the rates of duty.

[18] I venture to note, that after traversing a great portion of the Line, visiting almost all the principal Indian sources of the salt consumed in British Continental India, and acquiring on the spot some familiarity with the Punjab and Bengal systems, I have been much impressed with the advantages likely to result from a fusion of the three departments. A maximun of revenue with a minimum of expenditure can never, it seems to me, be even hoped for, until the whole establishment charged with the collection of the salt tax in this virtually one and undivided territory, be worked on one uniform system, as a single department. After a good deal of discussion, the Government of India decided that this must be done in the case of the Punjab, North-Western and Central Provinces' Sections of the Imperial Line, and the arguments, then approved, apply with equal cogency here.

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* It is only fair to my opponents to say that they can, owing to the Bombay system, put the case even stronger than this; good salt has sold in Bombay during the past year at Re. 1-7 a maund *after* paying (or being *supposed to pay*) a duty of Re. 1-8 a maund; Re. 1-7 to the lower classes in Bombay, is certainly not more than 12 annas is to the same classes in Upper India. In Upper India, salt costs Rs. 6 a maund; of the difference Rs. 5-4, only Re. 1-8 or 2-7ths is therefore due to our higher rate of duty. This, however, is an extreme case, two-fifths is the average.

to discriminate a *majority* even of these causes, much less assign to them their proper values. The operations of each department are influenced, and sometimes most materially, by occurrences within the jurisdiction of the others, of which it is difficult, under present arrangements, to obtain cognizance; and in submitting the following remarks on the administration of the Imperial Customs Line, during the past official year, I must solicit indulgence for any erroneous conclusions into which the limited information at my command may possibly have led me; as well as for a general incompleteness, which no exertions have sufficed to avert.

or even at times satisfactorily to explain them.

FINANCIAL RESULTS.

GROSS REALIZATIONS.:

24. The gross revenue* realized during 1867-68 amounted to Rs. 1,21,62,544, a sum considerably in excess of any former *official* year's income.

compared with those of previous official years:

Year.	Line.	Gross Receipts, Internal Department.	Total.
	Rs.	Rs.	Rs.
1863-64	91,97,374	1,55,750	93,53,124
1864-65	90,50,148	1,93,894	92,44,042
1865-66	1,14,10,601	1,40,079	1,15,50,680
1866-67	1,12,36,705	92,342	1,13,29,047
1867-68	1,20,63,529	99,015	1,21,62,544

with previous corresponding 12 monthly periods:

25. To render any comparison, however, really useful, we must neglect official years, and place the revenue of 1867-68 in juxtaposition with that of previous corresponding 12 monthly periods. Thus tested, though far ahead of all others, the collections of 1867-68 (as the sub-noted figures show) fall somewhat short of those of the 12 months that immediately preceded it.

Gross Receipts.

Year.	Line.	Internal.	Total.
	Rs.	Rs.	Rs.
1867-68	1,20,63,529	99,015	1,21,62,544
Corresponding 12 months 1866-67	1,26,85,570	1,00,736	1,27,86,306
Do. do. 1865-66 ...	1,11,94,713	1,40,079	1,13,34,792
Do. do. 1864-65 ...	97,34,408	1,93,894	99,28,302

* Includes Doab collections; heretofore neither income nor expenditure, on account of the Internal Department, have been taken into account in reporting on the results of the department as a whole. Since, however, the Line collections now materially depend on the labors of the Internal Department, to exclude its cost from the schedule of charges, is to convey an incorrect idea of the real percentage that this bears to realizations. The small income that the Internal Department yields incidentally, does not nearly cover its expenses, and but for the benefit to the Line, it would not be maintained. Hitherto, only Line charges have been debited against Line realizations, whereas, in reality, a very large proportion of the cost of the Internal Department ought also to have been thus debited. The object clearly is to get at the true proportion that the total cost of collection bears to the total revenue, and this can only be done by adding to the Line revenue, the small income of the Internal Department, and then debiting against the joint total, the whole of the charges, *Line* and Internal. It will make our charges seem much heavier than they have hitherto appeared, but it will possess the advantage of correctly representing the real facts.

analysed.

26. To explain these results, it will be necessary to consider the various items, composing our gross revenue, under the two principal heads, Line and Internal, and to compare them with similar items of the income of past years. In making this comparison, I shall make use of the results obtained, not in past official years, but in past periods of 12 months, corresponding with those included in 1867-68.

LINE.

27. Details of the Line collections, in the year under review and previous corresponding periods, are as follow:—

Year.	Salt.	Sugar.	Miscellaneous.	Total.
	Rs.	Rs.	Rs.	Rs.
1867-68	1,03,89,469	16,23,452	50,617	1,20,63,529
Corresponding 12 months 1866-67	1,12,28,154	14,17,808	39,608	1,26,85,570
Do. do. 1865-66 ...	96,49,582	15,08,032	37,099	1,11,94,713
Do. do. 1864-65 ...	83,27,959	13,72,550	33,899	97,34,408

Salt.

Decrease, as compared with previous 12 months,

due first to some general cause widely affecting the salt trade of Continental India:

28. It appears from the above, that the salt revenue of the past official year, while rather more than 7½ per cent. in excess of that for 1865-66, is somewhat less than 7½ below that of 1866-67. Before entering into a consideration of the many local causes that have helped to produce this difference, I may note that there is some reason to suppose that besides these more or less local causes, some widely extended influence operated to stimulate the salt trade of Continental India, as a whole, in 1866-67, and partially depress it in 1867-68.

The following figures show that there was a simultaneous rise in the receipts of all the three great departments in the former year, and in the latter, a fall, in both the Punjab and Line. Nay, even in Bengal, there is reason to believe that, but for a local cause, that I shall notice hereafter (*vide* paras. 33-36) 1867-68 would have shown little advance on its predecessor.

Department.	1867-68.	Corresponding 12 months of 1866-67.	Corresponding 12 months of 1865-66.
	Rs.	Rs.	Rs.
Bengal	2,68,85,000	2,61,62,168	2,42,00,000
Punjab	35,90,000	39,45,000	33,45,000
Line	1,93,90,000	1,12,28,000	96,50,000

That this general oscillation was connected with fluctuations in the cotton and grain markets, capital in Native hands being at one time drawn into other channels, and at another finding in salt, especially in Upper India, its most attractive, if not only speculative investment, I entertain no doubt, but the impossibility of obtaining sufficient data prevents my working out in detail this interesting question.

second to local causes.

29. Local and more patent causes of the decrease must now be noticed.

CUSTOMS DEPARTMENT FOR THE OFFICIAL YEAR 1867-68.

Import of Kokan salt, which pays only half duty, has increased.

The extension of railways is enabling Kokan salt, which only pays us half duty, year by year to displace more and more full duty-paying Western *(vide para.* 58 *and Central Provinces' Section, Review paras.* 8, 9, 35, *&c.)* The increase of Kokan in 1867-68, as compared with 1866-67, was 80,000 maunds, representing a loss of Rs. 1,20,000 to our Line collections. This would seem to have been partially balanced by a decrease of 30,000 maunds in Madras (also half duty) salt, but there is reason to believe (*vide* Central Provinces' Section Report) that the major portion of this latter decrease is due to an increase in the amount which has rounded our terminus at Sama Singha. *(Vide para.* 12 *and Central Provinces' Section, Review paras.* 28, 29, 42*).* On the whole, it seems probable that fully one lakh, out of the $8\frac{1}{4}$ lakhs by which the salt collections of 1867-68 fall short of those of 1866-67, must be debited to the increase in the import of half duty-paying salt, and consequent decrease in that of full dutied staples.

The season peculiarly unfavorable. The rains commenced early and ended late. Carriage was long absorbed in agricultural operations.

30. Favorable, as in many places, it doubtless was to agriculturists, the weather, during 1867-68, operated in many ways to check most seriously the salt trade. The rains, unusually plentiful, began early and were greatly prolonged. Carts, cattle, and the like, were early taken up for, and long retained in, agricultural operations; and a vast quantity of carriage that, during 1866-67, was utilized in the salt trade in 1867-68, found full employment, throughout the year, in the fields, or in the transport of their produce. How great the difference was may be judged from the fact that in Hansie*, for instance, the rainfall from May to October 1866, was only six inches, while for the same period of 1867, it was 28 inches. Then, besides this, the roads, in 1866-67, were comparatively hard, dry, and good, while almost throughout the year under review, even for the diminished carriage available, they have been the very reverse of this. Not only were the rains unusually copious and prolonged; but in December, January, February, and March, we have had heavy and unseasonable showers, which not only perpetuated the evil condition of the roads, and repeatedly, for more than a week at a time, put an entire stop to all movement in salt; but also, and this was perhaps the most serious consequence, checked manufacture at Phullowdee, Deedwana, Sooltanpore, Noh and Bhurtpore, to an extent that at one period was alarming.† It will readily be understood that a season which left carriage plentiful and cheap, and roads hard and dry, while it facilitated manufacture, would greatly stimulate the salt trade, while a succeeding season, of which the exact reverse has to be predicated, would equally discourage and depress it.

Traffic was greatly impeded.

After the rains, unseasonable showers further depressed trade

and checked manufacture.

Even before the rains, the cost of carriage rose owing to the Hurdwar Fair.

31. Even before the rains commenced in the early part of 1867-68, when our trade ought to have been all that we could have desired, it was seriously checked, along the upper half of the Line, by the Hurdwar Fair. Innumerable pilgrims flocked to the "*Kombh*‡ *ka Mela,*" and, for nearly two months, they absorbed so

* Unusually copious rains were not confined to the Punjab. Very considerable portions of the Line in Jhansie, Saugor and Hoshungabad were for days, at a time, entirely under water. The rain-fall in Gadurwarra, Z. Saugor, is said to have been 117 inches, against an average of 45 inches; in Hoshungabad 80 inches, against an average of 40 inches, &c., &c.

† The falling off in the manufacture at Bhurtpore was, as compared with 1866-67, nearly one-third, no less than 3,52,533 maunds; at Sooltanpore, with more wells and pans at work, the yield was only $5\frac{3}{4}$ lakhs of maunds against $6\frac{3}{4}$ in the previous year. In Noh, again, also, with an increased number of works, the yield was only 1 lakh against nearly $1\frac{3}{4}$ in 1866-67. The exact falling off in Deedwanna and Phullowdee cannot be ascertained.

‡ This fair locally injured us in another way. Cholera broke out amongst the returning pilgrims, and the rigorous quarantine enforced, at Hissar and other places, quite paralysed trade for the time.

much of the carriage in the Hansie, Delhi and Muttra Divisions, as to raise its cost and injure the salt trade materially.

Rise in the price of Western salts

diminished imports:

32. The unusual demand in 1866-67, greatly diminished the stocks in hand at many of the salt sources, and as the unseasonable weather greatly impeded manufacture, prices naturally rose at the various surrs in Bhurtpore, which furnish the Balumbha salt. Thirteen lacs sixty-eight thousand eight hundred and fifty-six maunds were sold in 1866-67 at an average of 6 annas and 6 pie, while only 11,07,511 maunds were sold in 1867-68 at an average price of 8 annas and 4 pie.

Of Sooltanpooree salt, the stocks (unusually* low at the commencement of the past year and never properly replenished during its currency, owing to the unfavorable weather) were almost exhausted during 1867-68, so that, although a great quantity of very inferior salt from the Zahidpore and three other surrs, that had, for years, failed to find a purchaser, was disposed of, only 7,33,696 maunds could be made available, against 7,90,726, in the preceding 12 months, and notwithstanding the inferior quality of much that was sold, the best kinds rose gradually, from three maunds for a rupee, in 1866-67, to a rupee a maund towards the close of 1867-68. Naturally, rises in price like these had *their* effect in reducing imports.

and in the debatable land between Eastern and Western salts.

33. Between Patna and Fyzabad, Bettiah and Baraitch, Tekaree and Rewah (I indicate places well outside the tract) lies an extensive debateable land, in which the Eastern and Western salt currents meet. The line of junction oscillates, not only from season to season, the Eastern pushing higher up, in the rains, the Western, lower down, in the dry weather, but from year to year, according to variations in the cost of carriage, and of the different descriptions of salt. It seems to have been the unanimous opinion of the traders interested in this tract, that, during the year under review, more Eastern and less Western salt found its way thither.

The price of Eastern salt having fallen:

34. I believe that there are some grounds for this belief. Cheapness is an irresistible argument. I have noticed the rise in Western. I have now to call attention to the simultaneous fall in Eastern; throughout the whole 12 months of 1866-67, the *monthly* average price of Liverpool salt in Calcutta *never* fell below Rs. 100 (per 100 Brit. Mds. in Bond), and for four months (May, June, September, and November), it exceeded Rs. 120. Per contra, in 1867-68, the monthly average, during four months, September, November, December and January, was *below* Rs. 100, and it *never* reached Rs. 120.

35. The highest average prices of Calcutta salt, during 1867-68, were in May, June, July, and the months of June, July, August, were our least unfavorable months, yielding slightly more than even the corresponding months of 1866-67. The lowest average prices of Calcutta salt in 1867-68 were in November, December, January and the months, December, January, February were our worst months, yielding 7¾ lakhs less than the corresponding months of the previous year (see further paras. 68 and 69).

36. The railway returns, again, show that during 1867-68, 3,72,576 maunds of Eastern salts were delivered *at* and *above* Patna, against 1,64,794 maunds during the previous 12 months. A considerable portion of this difference is doubtless due to the

* Most of the great Sooltanpooree traders went in April 1867 to Hurdwar; before doing so, they, in February and March, threw something like two months' extra supplies, intended for April and May, across the Line: thus abnormally lowering the stocks at the surrs, and largely increasing the imports for 1866-67, at the expense of those for 1867-68.

supersession of river by rail traffic, but remembering the rise in Western, and fall in Eastern salts, the manner in which our imports *do* rise and fall, with alterations, of any duration, in Calcutta prices, and the fact that there is an increase, this year, of 7¼ lakhs in the Bengal collections, I cannot escape the conviction that a portion also is due to the supersession, in the debatable land, of Western, by Eastern salts. Throughout the year, Eastern under-sold Western at Ghazeepore, and though any exact estimate is impossible, I believe we shall be well within the mark in attributing to this supersession a lakh of maunds and three lakhs of revenue, out of the total Departmental loss.

Eastern, to a certain extent, superseded Western.

37. Rumours, as well as realities, have also operated adversely to the financial interests of the State, during the year under review. A proposition to re-open the salt works in Oudh, and greatly reduce the duty leviable on salt there produced, and the enquiries made, previous to the official promulgation of that proposition, greatly disturbed a certain branch of the salt trade. Of this latter, as of all other important trades, a considerable proportion always consists of speculative investments, intended, not to supply the demand of the immediate moment, but to be held in view to future more favorable operations in the market. To all such investments in the Delhi, Muttra and Agra Divisions, the rumour of the contemplated changes opposed a notable bar. The agitation was somewhat prolonged, and it was not until after a lapse of many months that the Chief Commissioner of Oudh authorized this department to inform the trade that it had been decided not to re-open the salt works. Practically, even this did not remedy the evil. It became known that notwithstanding this authorization, the Chief Commissioner had stated that although the assertion that the people were suffering severely from the want of a sufficient supply of salt *had not been actually proved*, there was a strong impression on his mind that Mr. Braddon's conclusions (to wit that the people *were* so suffering and that the salt works ought to be re-opened) were in the main true. It further became known that, having thus recorded his own convictions, he had called upon all his subordinates to enquire into the matter, and furnish any information that might throw further light upon the subject. Among uneducated men like the majority of our traders, the conclusion was frequently drawn that, after all, the salt works would be re-opened, and it is only quite recently that this idea has ceased to influence trade.*

Rumours of changes in our Customs arrangements, in 1867-68, discouraged speculative imports:

38. Nor was this the only disturbing influence. Most unaccountably, the people of the three Punjab divisions of the Line, took it into their heads, towards the close of 1867, that the salt tax was to be abolished, and a capitation tax, of five annas a head, substituted. This rumour was rank when, late in the year, I traversed this portion of the Line, and though I contradicted it myself, and had it contradicted everywhere, thereby apparently re-assuring the traders, it broke† out again two months later with redoubled force; so that the Collector of Hansie, on his tour, met long strings of carts and camels, that had gone to Bhewanee (the chief salt mart in that circle) to fetch salt, returning empty; the traders having determined to delay imports, pending the coming supposed abolition of the Line. District

* It must not for a moment be supposed that by these remarks, I presume to cavil or carp at the course which, in the interests of the people, a superior authority found it necessary to adopt. Practically, however, that course did affect the course of trade, and cannot, therefore, be ignored, in a review like this.

† It seems probable that the census operations in some way originated this rumour.

Officers were at once addressed, and measures taken to remove, effectually, this groundless panic.

but had stimulated these in the previous year,

39. Much in the same blind way that rumour obstructed the trade in 1867-68 did she stimulate it in 1866-67, for, during the latter half of this year, an idea got abroad that, on the commencement of the new official year, the duty would be raised to Rs. 4, and speculative investors naturally hurried in huge despatches, eager to grasp the extra one rupee profit per maund that thus became probable.

amongst other causes, thus leading to over-trading in 1866-67.

40. There is no doubt that this rumour, amongst other things, greatly contributed* to what can scarcely be doubted to have been the over-trading of 1866-67. 1865-66, with its salt revenue of 96½ lakhs, and its imports of nearly 34 lakhs of maunds, was by far the most prosperous year that the department had ever known. When 1866-67 (twelve months) followed with a revenue of 112¼ lakhs, and an import of nearly 40 lakhs of maunds, there was every reason to suppose that some unusual stimulus to trade had led to more than a year's supply being imported, within the year; and when comparison with the results of the other great Salt Departments that supply the same area, showed that they too had had an unusually prosperous year, no doubt could well remain on this point. Thirty-four lakhs of maunds was the largest quantity of salt ever, up to that time, imported across the Line, and when, with an actual increase in the supplies poured in through other channels, with no material change in Line†, area of supply, rate of duty or organization of establishment, the very next year showed an import of 40 lakhs, or nearly 18 per cent. in excess of its predecessor, itself far in excess of any previous period, it was only reasonable to suppose that a reaction would follow, and the revenue and imports of 1867-68 contrast unfavorably, not only with those of 1866-67, but also of 1865-66.

That this over-trading, coupled with all the other adverse influences, above noticed, should so little have depressed our salt imports, is a matter for congratulation.

41. That such has not been the case, and that despite this and all the other important depressing influences already noticed, the salt revenue and imports of 1867-68 are far ahead of those of 1865-66, and every other previous year, and only slightly below‡ those of even 1866-67, has been a matter of *equal congratulation* and *astonishment* to every one well acquainted with the department.

42. Stocks are still reported to be large, and some officers are of opinion that, during the past year, we have experienced only the commencement of the reaction, and that this current official year, 1868-69, will show its effect much more markedly. The future must decide this question; for my part, relying on the zeal and devotion to their duties of the majority of my officers, I am hopeful that the increased efficiency of the subordinate officials, which may be fairly looked for when the new scale of allowances is sanctioned, and the healthily progressive character which our revenue has always hitherto evinced, may enable us to tide over satisfactorily any residuary effects of this reaction.

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* The Sooltanporee traders' action (*vide* note, para. 32) also contributed to this excess of imports as compared with immediate demand.

† At the same time, see also the Central Provinces' Section, because although there were no very material changes of Line in 1866-67, still, in this year, the full effect was first felt of previous changes. This effect, however, was only to the extent of one lakh of maunds, so that the argument remains unaffected.

‡ The reason of the apparent falling off in revenue being greater than the real decrease in imports, is due to an increase in the import of half duty-paying Kokan, at the expense of full duty-paying western, *vide* paras. 29, 58, &c.

CUSTOMS DEPARTMENT FOR THE OFFICIAL YEAR 1867-68.

Sugar.

43. The table given at para. 27 shows that, in our sugar collections, there has been an increase of 7½ per cent., as compared with 1865-66, and of no less than 14½ per cent., as compared with 1866-67 (full twelve months). In effect, the sugar revenue of 1867-68 is the largest that has ever been levied on the Imperial Line, a pertinent commentary on the somewhat premature assertion that our duties were crushing the trade.

Increase as compared with previous 12 months:

44. Although the gradual development of trade partially accounts for the increase of our sugar revenue, this is, in reality, due, amongst other causes, to those abundant rains, noticed as so unfavorable where the salt trade was concerned. For several succeeding seasons, but specially in 1866, the sugar crop, owing to deficient rains in some of those districts whose produce chiefly used to cross our Line, has been scanty, and prices* have consequently ranged high. The same causes, that with us rendered sugar dear, intensified, in parts of Rajpootana, (which consumes that sugar) resulted in something like a famine, and deprived the people of the means of procuring luxuries. The same bountiful rains that have this year made our sugars plentiful and cheap, have given abundant harvests, and, consequently, the means of purchasing them to the consumers of those sugars.

due partly to development of trade:

partly to abundant rains of 1867 making sugar cheap, and furnishing consumers with means of purchasing it:

45. The favorable harvest having, for the first time since the railway was completed, created a brisk demand for sugar in Rajpootana, very large quantities of this article were brought up by rail from marts below Allahabad, to Agra and Delhi. Some little of this same sugar has, in past years, it is true, found its way, by other means of conveyance, to both these divisions, principally the former, but the facilities for transport, now afforded by rail, have increased the amount ten-fold.

and partly to the Rail enabling large quantities of sugar from Jounpore and other marts below Allahabad, to compete in the Rajpootana trade.

46. To these general causes, the general increase in our sugar revenue is due, but local causes (scarcity of carriage, &c.,) to be noticed in the Divisional Reviews, and the ever-increasing diversion of trade to the Chenab route, nullified in the Sirsa and Hansie Divisions, the action, so far as these latter are concerned, of these general causes, and converted, there, what should have been an increase, into the reverse.

47. The duty-free passage of sugar, down the Chenab, is a question so materially affecting the revenue of the upper divisions of the Imperial Line, that I am compelled to reopen it. I am aware that the Supreme Government once negatived a proposal to tax exports by this route, but this decision was, I believe, based on the impression that much of this sugar was ultimately re-exported from Kurrachee; and as all my enquiries lead to the conviction that such is not the case, I respectfully solicit a reconsideration of the matter. The major portion of the sugar, now exported by the Chenab, is (as I was last autumn informed on the spot) intended for consumption in Bhawulpore and Rajpootana. The remainder is consumed, it is said, by hill tribes, west of the Indus, and subjects of our own, resident above, *i. e.*, outside our Line. If the sugar duties are to be abolished *in toto*, well and good. One naturally deprecates, in the present state of our Imperial finances, relinquishing an item which (with proper arrangement on the Indus and Chenab, and modifications in our present Central Provinces'

Large as our revenue is, the free passage of sugar by the Chenab has reduced it below what it would otherwise have been. The question deserves re-consideration.

* Traders have assured me that an enhancement in canal rates temporarily diminished the breadth of sugar cultivation, and thus, both by reducing the gross produce, and increasing its cost, aided to raise the prices of some sugars. The highest canal rates, however, form so small a percentage on the total cost of cultivation and manufacture, that I cannot attach much weight to this cause, though it may have contributed slightly to the results observed.

rules) may be fairly taken at 20 lakhs per annum, with a prospect of increase hereafter; but if this *can* be safely given up, so much the better for trade. But if they are to be elsewhere maintained, I submit that consistency demands that we should lay them on the Indus and Chenab, as well as elsewhere. By far the greater portion of this sugar is consumed in foreign states; and such subjects of our own as share its use live outside our Line, and, getting their salt at half the price paid by their fellows inside the Line, can equitably be required to pay a little more for their sugar. It is difficult to obtain reliable statistics on such matters, but I was informed at Fazilka, that, in the case of unrefined sugar, the non-duty paying route had only the advantage of rapidity of transport, and that even where refined sugar is concerned, the loss to the consumer by taxing the Chenab route will be only eight annas a maund, inasmuch as carriage by this latter route costs eight annas per maund more than it used to do by the natural Line down the Sutlege, from Ferozepore and Fazilka, to which trade would return as soon as the Chenab was put on the same footing as the Sutlege, in the matter of the duty. While, therefore, we reap no benefit ourselves, so long as we keep the Chenab open, we are still all the time virtually taxing the consumers to the extent of eight annas a maund. We have only to close the gap, and we shall then not only realize a considerable revenue on unrefined sugar, without increasing its cost to the purchaser, but in the case of refined sugar, while adding only eight annas a maund to the tax-payer's burthen, we shall be increasing the resources of the State to exactly double this extent. The matter is one deserving at least a fair rehearing.*

Miscellaneous receipts,

compared with those of the preceding 12 *months.*

48. The miscellaneous receipts are comparatively insignificant; but as there has been an increase in them of nearly 28 per cent. in the past, as compared with the preceding 12 months, it may be as well to exhibit the items that compose them, in detail.

Description of Receipts.	1867-68.			1866-67.		
	Rs.	A.	P.	Rs.	A.	P.
Confiscation and double duty shares	40,222	0	5	32,284	4	11
Fines and forfeitures	2,117	3	1	3,770	9	6
Savings from pay, petty repairs, green hedge, &c. ...	4,757	14	7	3,219	13	5
Fees on mafee and atrafee rowannahs	148	4	0	270	10	0
Sale proceeds of goods	771	10	7	63	4	4
License Tax	2,600	0	0	0	0	0
Total ...	50,617	0	8	39,608	10	2

To begin with, in the confiscation and double duty shares, which, according to the rules of the Account Department, are, in the first instance, credited as receipts, and then, on distribution, included in charges, there has been an increase of some Rs. 8,000. This is owing partly to an increase in the seizures of smuggled goods and partly to the relinquishment by Government of duty, formerly levied on salt, captured from smugglers. The decrease in fines and forfeitures, and increase in savings are not of a nature to require much explanation while, in regard to the last item, it is the firstfruits of a tax that was only imposed at the commencement of 1867-68.

* I believe I am correct in asserting that Sir D. McLeod, Colonel Lake, and Mr. A. A. Roberts, were all in favor of closing this duty-free gap.

CUSTOMS DEPARTMENT FOR THE OFFICIAL YEAR 1867-68.

INTERNAL.

49. Details of the Internal collections in the year under review and previous corresponding periods, are as follow:—

Year.	Duty on Salt.	License Fees.	Fines and Confiscations.	Total.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
1867-68 ...	44,021 0 0	54,664 0 0	330 0 0	99,015 0 0
1866-67 ... (12 months).	61,245 0 0	39,083 0 0	408 0 0	1,00,736 0 0
1865-66 ...	89,867 0 0	49,782 0 0	430 0 0	1,40,079 0 0
1864-65 ...	1,46,380 0 0	46,249 0 0	1,265 0 0	1,93,849 0 0

Duty on Salt.
Gradual decrease.

50. From the above it will be seen that there has, for the last four years, been a steady decrease in the amount of duty levied on salt, licitly manufactured inside the Line, in Oudh and the North-Western Provinces. It will be remembered that this manufacture is legal only in saltpetre refineries, and there, only because the separation of more or less edible salt is a necessary step in the process. The saltpetre trade of India, owing to improved methods of preparing an artificial nitre in Europe, has, for years, now been declining. Refineries have diminished in number, from 345 in 1864-65, to 127 in 1867-68, and their out-turn, from something over $4\frac{3}{4}$, to less than $1\frac{3}{4}$ lakhs of maunds. With a decrease in the quantity of saltpetre refined, there has necessarily been a corresponding diminution in the quantity of salt evolved in the process, and of the duty levied thereon.

License Fees.

Fluctuations explained.

51. In the item of license fees, which might have been expected to sink with the saltpetre trade, a considerable increase is observable. In 1865-66, when the duty on salt diminished by one-third, the license fees rose some $8\frac{1}{2}$ per cent. This was due to the Kharee licenses being raised from Rs. 2 to Rs. 25. This led, in 1866-67, to a good deal of illegal clubbing between the Kharee workers, and, coupled with the decrease in all classes of saltpetre works, reduced the fees by more than 20 per cent. Special precautions were taken during the current year to prevent evasions of the license rules, and this tended considerably to increase the fee revenue, while, simultaneously, from causes which have scarcely at present been satisfactorily explained, an unusual briskness in the Sujjee (impure Carbonate of Potash) and Kharee (impure Sulphate of Soda) trades further increased the number of applicants for licenses. Our review of the gross realizations ends with the item of fines and confiscations, and the fluctuations in these have been too insignificant, during the last three years, to demand special notice here.

Fines and confiscations.

CHARGES compared with those of previous official years:

52. The total charges for the official year 1867-68 amounted to Rs. 14,69,127;* more than 11 per cent. in excess of 1866-67 (11 months), and nearly 5 per cent in excess of 1865-66.

Total Charges.

Year.	Line.	Internal.	Total.
	Rs. A. P.	Rs. A. P.	Rs. A.
1863-64	9,99,437 0 0	1,94,270 0 0	11,93,707 0
1864-65	9,95,236 0 0	2,40,156 0 0	12,35,392 0
1865-66	11,78,948 0 0	2,21,936 0 0	14,00,884 0
1866-67	11,29,982 0 0	1,90,548 0 0	13,20,530 0
1867-68	12,58,483 0 0	2,10,644 0 0	14,69,127 0

* *Vide* note to paragraph 24.

with previous corresponding 12 monthly periods

Neglecting, however, as we must do, official years, and comparing corresponding 12 monthly periods, we find that the charges of 1867-68 really exceeded those of the preceding 12 months by little more than 2¼ per cent., while, as will be more particularly shown hereafter, the percentage by which the charges of 1867-68 exceed those of other past years, is less than the percentage by which its realizations exceed theirs.

Total Charges.

Year.	Line.	Internal.	Total.
	Rs. A. P.	Rs. A. P.	Rs. A. P.
1867-68	12,58,483 0 0	2,10,644 0 0	14,69,127 0 0
1866-67 (corresponding 12 months)	12,28,419 0 0	2,08,300 0 0	14,36,719 0 0
1865-66, ditto	11,73,043 0 0	2,21,936 0 0	13,94,979 0 0
1864-65, ditto	9,70,717 0 0	2,40,156 0 0	12,10,873 0 0

Line.

53. In the Line expenses, a more or less considerable increase is observable in each of the last four years, and it may be as well to explain briefly the causes of this. Details are given in the several Sectional and Divisional Reviews; it will here be sufficient to say that while, in each branch of expenditure, increased economy has reduced the actual costs of existing portions of the establishment, charges of a nature not formerly debited to us, coupled with extensions of Line, have swelled the totals of our charges. During the past year, Rs. 22,000, on account of petty constructions and repairs, heretofore charged to the D. P. W., have been included in our accounts. In January 1865, the Nagpore Line was first laid down: in May of the same year, the Raipore Line. In January 1866, the Nimar extension took place. In 1867, the Raipore Line was strengthened, and posts were opened at the Nagpore, Boreebunder and Kullian Railway stations; and to these causes alone the progressive increase is due.

Internal.

54. In the Internal Department the variations in the charges have been small; the decrease noticeable in 1865-66 and 1866-67 is almost exclusively due to a continuous reduction in the number of mooshriffs, or excise agents, stationed at the various saltpetre refineries, consequent on the decrease in the number of these latter.

NET RECEIPTS compared with those of previous official years:

55. Deducting now these charges from our gross realizations, we find that the net revenue for 1867-68 amounted to Rs. 1,06,93,417, being more than 6 per cent. in excess of that of any previous official year.

Year.	Gross Receipts.	Charges.	Net Receipts.	Percentage.
	Rs.	Rs.	Rs.	
1863-64	93,53,124	11,93,707	81,59,417	12·76
1864-65	92,44,042	12,35,392	80,08,650	13·36
1865-66	1,15,50,680	14,00,884	1,01,49,796	12·13
1866-67	1,13,29,047	13,20,530	1,00,08,517	11·66
1867-68	1,21,62,544	14,69,127	1,06,93,417	12·07

CUSTOMS DEPARTMENT FOR THE OFFICIAL YEAR 1867-68.

Compared, however, with corresponding 12 monthly periods, 1867-68 comes out, (ahead indeed of all other previous years) but nearly 6 per cent. below 1866-67.

with those of corresponding 12 monthly periods

Year.	Gross Receipts.	Charges	Net Receipts.	Percentage of charges* on realizations.
	Rs.	Rs.	Rs.	
1867-68	1,21,62,544	14,69,127	1,06,93,417	12·07
1866-67 (corresponding 12 months)	1,27,86,306	14,36,719	1,13,49,587	11·24
1865-66, do.	1,13,34,792	13,94,979	99,39,813	12·30
1864-65, do.	99,28,302	12,10,873	87,17,429	12·19

PERCENTAGE OF CHARGES ON REALIZATIONS

56. The proportion that the total cost of collection bore to the gross receipts in 1867-68 very slightly exceeded 12 per cent. This is lower than in any preceding corresponding 12 months, except 1866-67. The causes that led to an excess of some $\frac{3}{4}$ per cent. as compared with this latter have already been fully considered, in dealing with realizations and charges: here it is chiefly necessary to give prominence to the fact that the percentage above given, in reality by no means fairly represents the facts of the case.

as deduced from the accounts of this Department alone, fallacious:

57. For this, there are two reasons,—1st, the mutually dependent position of the three great Customs Departments of Continental India has been, above, insisted on. How much of the Line collections are the result of the vigilance of the Bengal Preventive Establishment, and how much of the Bengal revenue is due to the labors of our Line officials, no one can pretend to decide; but it is certain that if the Line were withdrawn, Sambhur salt would beat all duty-paying salt, even out of the Calcutta market; and that, similarly, if salt were allowed to enter Bengal without paying duty, before many years had passed, not a grain of Western salt would pay duty to cross our Line. It will not, therefore, do for any one, relying on the 12 per centage of charges above shown, to pronounce the cost of collection excessive. No just estimate of this latter can ever be formed, until the total cost of all three departments be compared with their total realizations. To take the cost of the Imperial Line, judge its utility, and pronounce in regard to the reasonableness of its charges, merely by comparison with the income realized along it, would be as unreasonable as to take a single division of that Line and similarly compare its income and expenditure. Sirsa and Hoshungabad would show a percentage of from 80 to 90; Hansie, Delhi, Agra and Muttra, of only 4 to 6; but each division is as necessary and valuable as any other; and the throwing open of any one would destroy the revenue of the others. It is only by comparing the charges and realizations of the whole Line, that any *approximate* idea of its imperial value can be formed; and similarly, this latter can only be *correctly* ascertained by comparing the *joint* cost and realizations of the three great departments.†

1st, because the Punjab Imperial Line and Bengal Salt Customs are so intimately connected, that a just estimate can only be formed by comparing their *joint* cost, with their *joint* realizations;

58. In the second place, Madras and Bombay now realize large amounts of duty on the salt consumed within the Line, for which we receive no credit. During the last official year, they thus

2nd, because we obtained no credit from Bombay and Madras for revenue realized by them on our account.

* These have never previously been correctly shown, *vide* note to para. 24.

† This appears to me a strong argument in favor of the union of the three, *vide* also note to para. 23.

realized more than 8 lakhs of Rupees, a sum which, added to our collections, would reduce our percentage to little over 11. By all analogy of practice, this ought to be credited to us by transfer. Bombay and Madras salt, exported to Calcutta, goes away free, Bengal obtaining the full duty on such of this salt as its people consume; we ought to do the same. True, that as they cannot make sure that people, who take salt away from the coast *by land*, professing to intend disposing of it, in Continental India, will really do so, and not sell it *en route* in their own territories, it is quite right that Bombay and Madras should, in the first instance, levy their duty on the salt leaving the works; but on this crossing our Line, they ought to give us a corresponding credit. To us the matter is of very great importance. The Line collections during the past official year have been diminished, as compared with those of the preceding 12 months, by some $\frac{3}{4}$ of a lakh, simply owing to more salt, paying us only Re. 1-8-0 having been imported, thus displacing an equal quantity that paid us Rs. 3. In two years the rail will be open to Allahabad, and then, in all probability, it will make a difference of something more like 20 lakhs to us. Imperial interests, moreover, are at stake; there is much reason to fear* that a considerable proportion of the Kokan (Bombay) and Banwar (Madras) salts that cross our Line at half duty, *have never paid the other half anywhere;* the State being thus defrauded to a considerable and yearly increasing extent. *I recommend, as a matter of* IMPERIAL IMPORTANCE, that, in future, we be authorized to charge full duty on all salt attempting to cross our Line, unprotected by Bombay and Madras rowannahs, and that, in the case of all salt crossing, thus protected, at half duty rates, we be authorized, on submission of such rowannahs to the Governments to which they pertain, to take credit for the duty payments which they represent.

A proper adjustment of accounts with Bombay and Madras essential even from an Imperial point of view.

PROVINCIAL AND SECTIONAL RESULTS.

59. After what I have remarked in para. 57, it is hardly necessary to add that I attach but little importance to the fluctuations in the realizations, *inter se*, of the various sections of the department. Where loss in one is compensated by gain in the other, and such oscillations are the result of changes in the course of trade beyond our control, they signify but little. Still, as it may possess a certain interest, I proceed briefly to notice the proportions in which the departmental totals of realizations, charges and net receipts pertain to the several Provincial sections of both the Line and Internal branches.

Gross realizations.

60. In the subjoined table, the gross revenue for 1867-68, and three previous corresponding 12 monthly periods, is shown separately, for each section of the department.

Realizations.

YEAR.	PUNJAB.	NORTH-WESTERN PROVINCES.			OUDH.	CENTRAL PROVINCES.	TOTAL.
	Line.	Line.	Internal.	TOTAL.	Internal.	Line.	
	Rs.	Rs	Rs.	Rs.	Rs.	Rs.	Rs.
1867-68	51,37,684	51,51,428	87,033	52,38,461	11,982	17,74,416	1,21,62,543
Corresponding 12 months of 1866-67	51,94,597	56,09,628	86,695	56,96,323	14,042	18,81,344	1,27,86,306
Do. of 1865-66	43,54,827	51,49,702	1,13,153	52,62,855	26,926	16,90,184	1,13,34,792
Do. of 1864-65	41,94,104	45,49,584	1,53,217	47,02,801	40,677	9,90,720	99,28,302
TOTAL ...	1,88,81,212	2,04,60,342	4,40,098	2,09,00,440	93,627	63,36,664	4,62,11,942
AVERAGE ...	45,95,303	51,15,085	1,10,024	52,25,110	23,406	15,84,166	1,15,52,985

* *Vide* note 4, para. 8, and Central Provinces' Sectional Review, paras. 9, 10, &c.

CUSTOMS DEPARTMENT FOR THE OFFICIAL YEAR 1867-68.

It will be seen that while the realizations of 1867-68, in almost every branch of every section, fell short of those of the preceding year, they were greatly above the average of the last four years, in both the Punjab and the Central Provinces, and slightly so in the North-Western Provinces, as a whole. As a matter of fact, as noticed in para. 64, the Punjab, under our present system of account, obtains credit for about $1\frac{1}{4}$ lakhs, of right pertaining to the North-Western Provinces; but this, were it not for the other fatal objections to our present system, would be a matter of little moment; since even, after making such corrections as are possible, each would still owe to the other much of its revenue, without its being possible to determine *how* much.

Charges.

61. In the next table, a similar detail to that given above of realizations, is shown for charges.

Charges.

Year.	Punjab.	North-Western Provinces.			Oudh.	Central Provinces.	Total.
	Line.	Line.	Internal.	Total.	Internal.	Line.	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1867-68	3,40,913	4,49,594	1,56,480	6,06,074	54,164	4,67,976	14,69,127
Corresponding 12 months of 1866-67	3,21,671	4,54,109	1,55,532	6,09,641	52,768	4,52,639	14,36,719
Do. of 1865-66	3,18,264	4,51,385	1,58,760	6,10,145	63,176	4,03,394	13,94,979
Do. of 1864-65... ...	3,63,735	4,38,023	1,87,163	6,25,186	52,993	1,98,959	12,10,873
Total ...	13,14,583	17,93,111	6,57,935	24,51,046	2,23,101	15,22,968	55,11,698
Average ...	3,28,646	4,48,278	1,64,483	6,12,761	55,775	3,80,742	13,77,924

The variations in charges are so fully considered in the several Sectional Reviews that no comments seem here required. As a rule, wherever extensions or re-organizations have not interfered, the tendency has been to reduce charges; and, unquestionably, in all matters of detail, a far more rigid economy is now practised than, a few years ago, was ever thought of.

Net receipts.

62. Combining the above tables, we obtain the net receipts of each section for each period, which I proceed to exhibit in a similar form.

Net Receipts.

Year.	Punjab.	North-Western Provinces.			Oudh.	Central Provinces.	Total.
	Line.	Line.	Internal.	Total.	Internal.	Line.	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1867-68	47,96,771	47,01,833	— 69,447	46,32,386	— 42,182	13,06,441	1,06,93,416
Corresponding 12 months of 1866-67	48,72,926	51,55,519	— 68,837	50,86,682	— 38,726	14,28,706	1,13,49,588
Do. of 1865-66	40,36,563	46,98,317	— 45,607	46,52,710	— 36,250	12,85,790	99,38,813
Do. of 1864-65	38,60,369	41,11,561	— 33,946	40,77,615	— 12,316	7,91,761	87,17,429
Total ...	1,75,66,629	1,86,67,230	— 2,17,837	1,84,49,393	— 1,29,474	48,12,698	4,06,99,246
Average ...	43,91,657	46,66,807	— 54,459	46,12,348	— 32,368	12,03,174	1,01,74,811

Notwithstanding, or perhaps I should more properly say, in consequence of increased expenditure, the net receipts, though subject, like all other items of revenue, to fluctuations, are, on the whole, steadily increasing. The Internal Department

does not directly pay its own expenses, but to it we owe entirely the realization of a portion of the Line revenue, more than twenty times its gross apparent deficit.

Percentage of costs on collections.

63. Deducing from the above tables, the percentage of costs on collections, in each section, for each branch, we obtain the following:—

Percentages of Costs on Collections.

Year.	Punjab.	North-Western Provinces.			Oudh.	Central Provinces.	Total.
	Line.	Line.	Internal.	Total.	Internal.	Line.	
1867-68	6·6	8·72	179·8	11·56	455·1	26·37	12·07
Corresponding 12 months of 1866-67	6·15	8·09	179·6	10·70	376·9	24·59	11·23
Do. of 1865-66	7·3	8·76	140·3	11·59	234·8	23·92	12·30
Do. of 1864-65	7·9	9·62	122·1	13·29	130·5	20·08	12·19
Total ...	27·95	35·19	621·8	47·14	1197·3	94·96	47·79
Average ...	6·99	8·79	155·4	11·78	299·3	23·74	11·95

Nothing, perhaps, could more clearly demonstrate the futility of percentages of this description, when taken alone. If one were to credit what the bare figures seem to prove, the Internal Department, instead of being, as it really is, a source of some 24 lakhs* net profit to Government, is a thoroughly losing institution, that does not even pay its own expenses! It is not, however, necessary to dwell further, here, on these sectional results. All this is done, at length, in the several Sectional and Divisional Reviews, which, for the convenience of the various Administrations to whom I have the honor to be subordinate, I have separately appended to this general report. One point specially deserves notice; excepting the 12 months of 1866-67, which, as already explained, can scarcely be considered a normal one, our profits have gone on increasing more rapidly than our expenses, and our percentage of costs on collections has consequently steadily decreased. This is most satisfactory as proving that we are not yet near our ultimatum. In revenue, as in agriculture, long before the practical limits of produce are reached, increased expenditure ceases to bring in proportional returns: up to this present time with us, increased expenditure has ever resulted in *more* than a proportional increase in realizations.

Our present system of accounts, whereby each Customs House takes credit for all payments made into it, without reference to the real locality of export and imports, is objectionable:

and should be modified.

64. Little importance as I attach to Provincial and Divisional fluctuations *inter se*, where financial results alone are concerned, they are, I consider, of great interest, where alterations in the currents and course of trade are in question. Hence, while it appears to me of little moment, *financially*, whether the Customs revenue of the North-Western Provinces is 43 lakhs, and that of the Punjab 50 lakhs, or *vice versâ*, I do think it most important that we should be correctly informed of the course of trade in each province, and of the amounts of each kind of exports and imports that *bonâ fide* cross the Line in each of its sections, divisions, and even beats. On this ground I consider our present system of accounts objectionable, and recommend its immediate modification. According to our present

* *Vide* para. 19 and note (14) to ditto.

practice, each Customs House takes credit for, and reports as its own exports and imports, all goods, the duty on which happens to be paid into it, although it often occurs that one-half of such goods may be intended to cross the Line in a wholly different jurisdiction. It follows that some Customs Houses show realizations far above, and others far below what, with reference to the *bonâ fide* trade crossing them, they ought really to have credit for; and that all our returns, as to the quantities of the several kinds of imports and exports (which must correspond with the financial results) are fallacious and delusive to a degree. During the past year, for instance, Delhi, and therefore the Punjab, show amongst their realizations, Rs. 1,20,317, duty on goods that, in effect, crossed the Muttra Line and belong to the North-Western Provinces. Similarly, Agra exhibits Rs. 1,78,760, belonging to Muttra; Nâgpore, Rs. 36,160, pertaining to Hoshungabad, &c.; and all our returns, in the same manner, convey a false idea of the comparative importance of trade in the several portions of the Line. Again, owing to this same cause, divisions exhibit vast imports of descriptions of salt, no single grain of which ever comes near them, and endless confusion, in regard to matters, departmentally of vital importance, arises. A double set of accounts is impossible, and it follows (as will be seen so constantly in the Divisional Reviews) that while exhibiting, according to the returns, an import of so many lakhs of one kind of salt, and so many of another, we are obliged to qualify the returns with the remark that, in reality, most of this given salt crosses somewhere else; and is a paper, not a real import of this division; or that of this other given description, in reality much more is here imported than is shown in the figured statements.

65. How inconvenient this system is, in a department in which every fluctuation of locality and season, in every important description of import, has to be watched with the utmost care, enquired into, and satisfactorily explained, is difficult perhaps for any one who has not personally experienced the inconvenience to realize. The remedy is simple in the extreme, entails no extra labor, no extra cost; Custom Houses will, as now, receive payments from all comers, for goods, no matter where they are to be exported; but they will, as a matter of account, give each other credit by transfer, for sums received by one on account of goods which are to, or do pass in the other's Line. In the same way, the various posts, instead of, as now, taking credit for all goods, first touching the Line in their several jurisdictions, whether they cross there, or, as frequently happens, run up the Line for 20 or 30 miles, before they pass, will only reckon, amongst their imports and exports, those goods which actually cross at them, and are therefore weighed by their officers. The proposed change will in no way alter our practice; it will *only make our records correspond with facts*, and it is undoubted that such correspondence is essential to enable the head of this department to watch, as he ought, the variations in trade. I solicit permission to effect this change from the commencement of this current official year, which can be arranged, retrospectively, at any period during the year, on receipt of sanction, in communication with the several Accountants General. This matter is of far higher practical importance than might be at first surmised, and I trust that it may receive immediate attention.

COURSE OF TRADE.
SALT.
Fluctuations in the trade.

66. The fluctuations in the salt trade during the past year, have been, as usual, very great; and with our present means of information are by no means invariably susceptible of explanation.

Monthly detail of collections.

Certain general features, in the course of trade, are well marked, as may be seen from the following:—

Detail of monthly collections on Salt.

Months.	In 1866-67.	In 1867-68.
	Rs. A. P.	Rs. A. P.
April	11,84,977 4 9	11,62,006 15 8
May	11,81,933 9 5	10,92,416 5 9
June	7,85,199 15 5	7,43,280 2 1
July	2,59,612 2 11	2,79,166 14 8
August	1,66,953 15 10	2,00,746 5 0
September	4,79,503 10 5	3,50,411 9 2
October	13,20,809 15 2	11,94,900 13 3
November	10,91,383 15 8	11,43,695 13 5
December	11,94,414 14 11	9,17,434 10 2
January	13,57,161 0 3	11,32,881 9 9
February	11,59,879 7 10	8,85,445 13 3
March	10,46,324 10 10	12,87,073 14 8

Effect of rainy season in depressing trade.

67. In the first place, the effect that the rainy season has in putting a stop to the trade, is, as might be expected, very marked. Indeed, I should scarcely have noticed this, but for the fact that, owing to two different causes, the three consecutive months which include the greater portion of the rain-fall, June, July and August, were, *as compared* with the previous year, our best. The first cause was the ruling rates at Calcutta; second, the opening of the rail to Nagpore. In regard to this latter, I shall have more to say when discussing the question of a supply of salt; I here merely note that the direct connection by railway, of the works with the marts for which their produce is designed, as in the case with Bombay and Nagpore, removes the heretofore insuperable obstacle to trade during the rains, and did, as a fact, result in the Nagpore imports averaging nearly as well, during the monsoon, as in any other part of the year.

Influence of Calcutta prices.

68. The influence of Calcutta prices on our imports has been already referred to (para. 35). Let the price of salt fall and remain low, for any length of time, in Calcutta, and immediately our revenue falls off: on the other hand, let these prices begin to rise steadily, and our revenue revives. During the past year, the highest monthly average prices in Calcutta were Rs. 119-4, Rs. 119-8, and Rs. 119 (per 100 maunds in bond) in May, June and July, respectively: the result was that with us, June, July and August, were our three best consecutive months, as compared with the previous year. *Per contra*, the lowest average ruling rates were Rs. 88-12, Rs. 92-4, Rs. 97-12, in November, December and January: and in consequence, December, January, February were our three worst months, being 7½ lakhs in deficit as compared with the same period in 1866-67. From the close of January salt rose, and February ended in Calcutta with a ruling rate of Rs. 111-8, and March with us was the most successful

month in the year; the monthly figures indeed scarcely show how powerfully we were affected. Heavy showers in many places, early in March, temporarily hampered the trade; but salt was rising in Calcutta, standing, in fact, at Rs. 114, and during the last 15 days of the year, we not only realized the five lakhs paid in during the corresponding period of the previous year, but 4¼ lakhs in excess. This little fact is significant of the vicissitudes to which our revenue is subject; a month of bad weather, of low or high prices at Calcutta, and our collections exhibit a deficit, or an excess, of 6 or 8 lakhs, as compared with previous corresponding periods.

But I have not done with Calcutta prices. October is generally a busy month. Stocks, exhausted during the dull season of the rains, have to be replenished! October, 1866, was a bumper month, not only *was* it October; but Calcutta prices in September had averaged Rs. 124-12. October 1867 fell off sadly, but this might have been expected since the average Calcutta rate, in last September, was only Rs. 98-12. In October, however, Calcutta prices rose to Rs. 105, and up went our November's income, half a lakh above that of the previous November. In almost every month, during the last two years, this correspondence, or the cause of the discrepancy (such as exceptionally unseasonable or favorable weather at times introduces) is clearly traceable, and although other less patent causes, which I have, as yet, failed to reduce to any law, interfere, from time to time, to modify the results, I think I can even now, with the current weather reports from our subordinates, and the past month's Calcutta prices current before me, estimate, pretty correctly, the prospects of our revenue for the time being. That such a close correspondence should exist, is, considering the *comparatively* small area of the debateable land where the two great trade currents meet, by no means very explicable; but of the fact itself little doubt can, it seems to me, be entertained. The coincidences have been too persistent to be disposed of as accidental.

Rail superseding other forms of carriage.

69. Perhaps the most notable feature in the course of the salt (and sugar) trade of the past year, is the manner in which the Railway wagon is gradually superseding other forms of carriage, and *tending* to concentrate our imports on a few limited points of the Line, such as Nagpore, Agra and Delhi. This result is one of very great importance. I cannot, indeed, after most carefully examining the question in all its bearings, see our way to dispensing at any future period with the Line as a whole;* but I clearly foresee the time when, if the present Railway schemes are carried into effect, smuggling will, even in some of the worst parts of the Line, assume a very manageable character, and considerable reductions of establishment become practicable. Even as it is, the results that may be immediately looked for will prevent the necessity of a heavy extra outlay. In the Saugor Division, smuggling is troublesome to a degree, and owing to physical difficulties, more fully explained elsewhere (*vide* para. 68, Central Provinces' Section and General Review, para. 13) it could not have been properly repressed without a considerable increase to the number of posts. For this it would have been my duty to press, had it not been manifest that with the rail from Bombay open (as it will be, it is said, within a year) to Nursingpore, flooding (as it will) the whole country in rear of the Saugor Line with good and cheap Kokan salt, half the inducement to smuggle in, dear, though

* A considerable portion of it, of course, could be dispensed with, if duties were to be everywhere equalized, and *proper preventive arrangements were made on the Coast.*

excellent, Kansia and Sambhur, will disappear, and the strength of our Line be virtually doubled.

Bunjarah traffic disappearing.

70. What with the rail, the reclamation of waste lands, and the imposition of grazing taxes, Bunjarah traffic is becoming a thing of the past, even in localities where, for the time, we would gladly retain it a little longer. I have fully discussed this matter in the Central Provinces' Section (paras. 38, 39) to which it most especially pertains; but it was too important a feature in the general course of trade, to be entirely omitted here.

Salt enjoying Railway carriage, displacing other

71. Incidentally, the effect of Railways is to alter the staple of consumption, substituting some new rail-borne salt, for the old Bunjarah, or cart-carried kinds. Thus, in the Central Provinces, Kokan salt, which enjoys the advantage of rail carriage from the works to Nagpore, Khundwa (and we shall soon have to add Hoshungabad and Nursingpore) is displacing, everywhere in rear of the Saugor and Hoshungabad Divisions of the Line, the far superior, but necessarily Bunjarah-carried, Puchbuddra (or Kansia) and Sambhur, and, so far as I can yet judge, the time may not be far distant when Kokan will be disputing, in Allahabad and Benares, the consumption of the lower classes with Balumbha and Sooltanpooree.

Fallacy of the argument that Natives are unconquerably wedded to particular descriptions.

72. I must here notice the fallacy of the argument that the Natives are unconquerably wedded to particular descriptions of salt. This is an idea which has sprung out of the well-known antipathy of Natives to *any change*, and also, possibly, out of certain physiological effects that a change in the nature of the salt consumed is everywhere alleged to and (it is conceivable) may occasionally produce. Where Madras and Kokan salt used to meet, near Ambagurh, the people consuming either description, had wonderful stories of the effects produced by eating the other, it caused a flow of rheum from the eyes, it predisposed to rheumatism, &c., &c. In the country below Allahabad, the Western salt-eaters, some years ago, invariably declared that the use of Eastern salts induced herpes and other diseases of the skin. In Rohilcund and Meerut, the people, to this day, ascribe similar results to the consumption of Lahoree salt. In Nepal, again, where during the late war with Thibet, the usual supplies from the latter were shut out, and Eastern, and a little Western duty-paid salt, took their place, the Nepalese universally attributed to the use of these foreign staples, a cutaneous disorder which soon after was very prevalent. On the other hand, in the Nepalese Terai, always supplied with Eastern and Western salts, the people refuse the Thibet salt, alleging that it brings on a kind of itch. I might multiply examples, for the prejudice is universal; but these will suffice to illustrate my meaning. Now we know so *little* of the physiology of the action of different minerals on organic life, that it is impossible to say that a change in the description of salts consumed, some of which contain borax, some sulphur, some lime, some iodine, &c., in appreciable quantities, may *not* produce effects similar to those so universally believed in by races so widely separated in habitat, language, religion, customs, and even origin. But whether there be, or be not, any foundation in fact for this far-spread belief, it is certain that these effects (even if not wholly imaginary) are but transitory and soon forgotten.

Price even in India, and in Salt, determines consumption.

73. As a matter of fact, price rules the consumption of the masses in India, as elsewhere; prejudice, proportioned to ignorance, *retards* changes a little longer here than elsewhere, but the argument of cheapness is irresistible, and neither habit,

nor prejudice can long bar our marts to a good and cheap salt. Already the Sambhur and Kansia eaters north of the Satpooras, are beginning to consume Kokan; and the traders at Hurda made no secret of the fact that the moment the rail opened to that place, they would entirely cease importing the fine large crystalled Kansia and Buragura, and employ their capital exclusively in importing Kokan. It is not many years ago that no Bengal ryot could be induced to try Liverpool salt: it was purified with bones; it caused every disorder under the sun; it was ruinous alike to body and soul! Liverpool now rules the Calcutta market; in the Soonderbuns even, it is extensively consumed, and it forms the staple of consumption of $\frac{5}{8}$ths of the population* of Bengal.

Proportion of trade passing various divisions of the Line.

74. First among the divisions, with reference to the importance of the salt trade that crosses its Line, stands Agra, with Delhi but little behind. Hansie and Muttra follow, together falling short of Agra. Nagpore, with a daily increasing trade, ranks next. Saugor, Raipore, Jhansie, and Hoshungabad, and Sirsa, follow in the order that I have named them: the two latter being little more than preventive Lines, kept up rather for the benefit of the others, than on account of their own productiveness. The quantities of salt that passed each division, in 1867-68, were, according to our accounts, as follows :—

	Mds.		Mds.
Agra	9,65,664	Saugor	2,57,210
Delhi	8,79,704	Raipore ...	1,81,908
Hansie	5,14,787	Jhansie ...	1,22,433
Muttra	4,15,419	Hoshungabad ...	39,798
Nagpore	3,51,906	Sirsa	7,241

These totals, however, neither do, nor, under our present system, (*vide paras.* 64, 65) ever can, accurately represent the actual imports. Muttra ought to be above Hansie, Hoshungabad somewhat more nearly on a level with Jhansie, &c., &c.; as a whole, however, they enable us to form some idea of the Lines on which trade is concentrating, and hence have been introduced.

Proportions of different kinds of salts imported.

75. Although more than 20 kinds of salt already enumerated (*vide* paras. 8 and 9) cross the Imperial Line, eight descriptions constitute more than 99½ per cent. of the total imports. These eight kinds, and the amounts respectively imported of each, during the past official year, and corresponding 12 monthly periods, are shown in the subjoined table :—

Year.	Balumbha or Bhurtpore.	Sooltanporee.	Sambhur.	Bombay or Kokan.	Deedwana.	Puchbuddra or Kanside.	Salumbha.	Madras or Bunwar.	Other Salts.	Total.
1867-68	10,59,242	7,33,695	6,25,777	3,61,524	3,04,291	2,41,531	2,10,463	1,81,908	17,669	37,36,100
Corresponding 12 months of 1866-67 ...	13,35,018	7,90,726	6,39,458	2,81,533	3,08,725	2,75,773	1,12,328	2,11,090	34,376	39,89,027
Do. of 1865-66	11,92,412	5,65,658	5,65,540	2,82,732	3,21,928	2,67,475	85,677	71,810	42,594	33,95,826
Do. of 1864-65	10,47,762	6,01,606	4,38,250	18,553	3,16,692	2,34,940	91,251	... ...	36,207	27,85,261

* Out of 79 lakhs of maunds that paid duty in Bengal in 1867-68, 49¼ appear to have been Liverpool.

Detail of the more important kinds of salt imported across the Line.

76. Although we have, directly, but little concern with the sources which supply the consumption of our people, so long as their supplies, whencesoever obtained, all pay the required duty, we are yet greatly interested, indirectly, in knowing something about the more important staples, and I shall, therefore, briefly record some of the more important facts in regard to the eight descriptions above noticed, that in the course of my Line inspection and visits to the several sources, I have collected. In regard to not a few, my information is necessarily imperfect.

Balumbha or Bhurtpore salt.

77. Balumbha salt is made in the State of Bhurtpore, chiefly in the Deeg, Koombher, and Bhurtpore circles, and the Roopbas Pergunnah. The salt is of various qualities and kinds, known, locally, by a variety of names, and selling at widely different prices. The three leading kinds of salt are Muttya, Kuteela and Puneah, of which, roughly, the annual average produce may be about—

Muttya.	Kuteela.	Puneah.
12,000 Mds.	750,000 Mds.	600,000 Mds.

Manufacture and cost.

MUTTYA, a fine, comparatively large crystalled salt, is made entirely by lixiviating saline earth and evaporating the brine thus obtained (which is allowed to crystallize on thorny twigs) by solar heat, in small chunam lined pans. The works are very small, comprising usually only three pans; few turn out more than 100 maunds a year each, many only a few maunds, and instead of being clustered together, like the works where the other two kinds are made, are scattered about widely, one or two, at the most, in a village. There are a few in the neighbourhood of Bhurtpore itself, but they are most numerous in Roopbas. It is next to impossible to get at the real cost of this salt, which is almost a domestic manufacture, but it sold, during 1866-67 and 1867-68, at the works, at an average slightly below 14 annas a maund. This price, however, includes not only wages of labor, but also the State share of $\frac{1}{4}$th or $\frac{1}{3}$rd, as the case may be; exorbitant interest on borrowed capital (24 to 30 per cent.), various local fees, known under different names, &c., so that, roughly, the real cost of manufacture does not probably exceed 8 annas a maund.

KUTEELA, which, although inferior to Muttya, is also a fine, well crystallized salt, is made chiefly from natural brine, drawn from saline wells, to which, at a certain stage of concentration, a certain quantity of saline earth washings are added. Each little saline tract, as in many other parts of the country (here called a "surr"), contains a number of works (or agurs) varying from less than 10 to close upon 100. Each work consists of one or more wells, and from 10 to 30 shallow solar evaporation pans, lined throughout with chunam. These pans vary greatly in size from 30 to even 100 feet in length and from 20 to 40 in breadth, and are arranged on different levels, so that the brine may flow readily from one to another. The process of manufacture varies in different surrs; in some, the brine is allowed to flow through all the pans, remaining from one to four days in each, finally reaching the formation pan, and this I take to be the most usual plan. According to the size of the pans, it takes a pair of bullocks from one to three days to draw water enough to fill the first pan to the depth of from 6 to 11 inches. As soon as it is full, the water is allowed to run into No. 2. No. 1 is again filled; the contents of No. 2 are then run into No. 3, and of No. 1 into No. 2, and so on. By the time the brine has reached the last pan, it is greatly reduced in quantity, and

concentrated; and here the saline earth washings ("*russ*") are run into it. Every day or so, it continues to receive fresh supplies from the last preceding pan of natural brine, and from the "*Kothee*," as the lixiviating trough is called, of earth brine. When, in the hot weather, by continual accessions and evaporation, a pan full of brine, so concentrated as to crystallize rapidly on the hand when this is placed in it, has been obtained, thorny twigs of the *Jowasa** (Alhagi Maurorum), Jheend (Acacia Leucophlœa) &c., are placed in it, and when the greater portion of the brine is crystallized on these, the whole mass is removed. This is the best kind, "Awal" as it is termed. Some brine remains, and this, with what remains in the pans (*or kyarees*) is crystallized a second time, producing an inferior salt, known as "Doobara." Of Kuteela salt, there is rarely more than one yield in the year. In some surrs the rotation process is not followed. Each pan is filled direct from the well, and its contents, when they have reached a certain stage of concentration, run at once into the formation pan. Here again the cost of production cannot be easily got at. The great expense is, of course, the pans, which have to be relined† yearly with chunam, entailing heavy expenditure in digging, carting; burning and grinding‡ the kunkur, besides the labor of breaking up the old§ and laying down the new lining. An agur that, under very favorable circumstances, yields 2,000 maunds, or say Rs. 1,000 worth of salt, out of which the State demand averages Rs. 250, costs at least Rs. 300 in yearly repairs and Rs. 300 in labor, leaving only Rs. 150, profits to the owners of the works (*agureeas*) or as they are here often called *zemindars*,‖ who operate entirely on borrowed capital, paying from 18 to 30 per cent. interest. The State share varies; in some surrs, it is $\frac{1}{3}$rd (*Tihara*), in some $\frac{1}{4}$th (*Chat*), and in a few $\frac{2}{5}$ths (*Puchdo*), of the price realized by the sale of the produce. To prevent fraudulent or collusive sales, the State Tehseeldar of salt possesses a veto, and no purchase can be completed without his sanction. In the case of new works, the State, for the first three to five years, commonly allows the proprietor to pay a fixed contract rent, of say Rs. 2 a pan the first, Rs. 2-8 the second, Rs. 3 the third, and so on, but by the sixth year, at latest, the "share" system is introduced. About Deeg the numerous surrs make nothing, as far as I saw, but Kuteela. A great deal of this is made in the neighbourhood of Bhurtpore itself, and a very little in the Koombher circle. The average selling price of Kuteela at the works, during the last two official years, has been 8 annas 3 pie a maund.

PUNEAH salt, inferior in quality to both, is chiefly made in the Koombher circle. The works, and the process of manufacture, are much the same as in the case of Kuteela, but no washings

* Hence one of the names by which Balumbha salt is known is Jowasa, though this is often ignorantly applied in the Doab to Bhurtpore salt that in reality has *not* been crystallized on the camel thorn.

† The repairs take place at the close of the rainy season, and the pans are rarely at work before the 15th February.

‡ It is an extraordinary fact that the people will *not* grind the lime for this work with stone rollers (*chukkee*) as they do for every other work, but persist in grinding it with carts. The waste of power seems surprising; you see six or eight, and even ten, empty carts, each dragged by a pair of bullocks, going round and round in a ring, day after day, merely grinding lime. The people declare that lime ground in an ordinary mill, even though ground dry, will not answer!

§ These old lime linings are called "*papuree*," and are each year ground up with the new lime. They are commonly called the seed of the works (*beej*), and a considerable supply of this *seed* is considered indispensable to the formation of new works.

‖ In Bhurtpore landed proprietors are often called zemindars "Meethe ka," while the proprietors of the salt works are called zemindars "Shor" or "Kharee ka."

of saline earth are added in the case of Puneah, and the crystals are usually suffered to form upon the bottom of the pan without the aid of thorns as in the case of the preceding. The grain of this salt is smaller, the crystals being more rapidly formed, and it lacks that pre-eminent recommendation (as far as traders are concerned) possessed by the best Kuteela, of not losing weight by dryage. To mark their sense of its inferiority, I suppose, the salt workers give a greater weight of Puneah than Kuteela for the same local measure: the "*pulla*," which in the case of the former, weighs 5 Bhurtpore, or about 4½ British maunds, and in that of the latter only 4½ Bhurtpore or a little over 4 British maunds.

The average price per maund of Puneah, at the works, during the last two official years, has been 6 annas and 4 pie. All salt, whether Kuteela, or Puneah, is pitted soon after manufacture. The total Bhurtpore sales, for the last two years, *viz.*, between the 1st April 1866 and the 30th March 1868, appear to have been as follow:—

Muttya.		Kuteela.		Puneah.	
Total quantity.	Aggregate sale price.	Total quantity.	Aggregate sale price.	Total quantity.	Aggregate sale price.
Mds.	Rs.	Mds.	Rs.	Mds.	Rs.
17,087	14,904	1,388,716	7,15,936	1,070,566	4,25,668

Lines of import and means of transport.

Owing to their proximity to the works, Balumbha only crosses in the Agra and Muttra Divisions in the proportion of some ⅔rds in the former, and ⅓rd in the latter. A few bullocks are employed in the trade, but the only means of transport used for the mass of the salt, is the common country cart. The main lines of import, are the two metalled roads, from the city of Bhurtpore to the city of Agra, *viâ* our Bichpooree post, and into Muttra, by Koombher, Deeg, Goburdhun, and our Sithoa post. Of the Agra imports (of say 28,000 tons for the past year) a portion (say 10,000 tons) is consumed in Agra itself, and despatched by carts, to parts of the Muttra district, Eta, and Futtehgurh. The remainder (18,000 tons, during the past year), is despatched by rail to various stations, as low as Mirzapore; thus supplying the greater portion of the Doab below Agra, the south and south-east of Oudh, and the country east of Allahabad. The Muttra imports (of say 14,000 tons) supply the country round about, and, cart-carried, make their way through Rohilcund, and even to the west of Oudh. A small portion (about 3,000 tons during the past year), takes rail at Hatras, and is delivered in varying proportions, up and down, at stations comparatively near. Very little salt, during the past year, appears to have gone down by boat, but of this I have been unable to obtain reliable statistics. The area of distribution has been already indicated; it seems sufficient to say here, that this salt finds its way nearly all over the North-Western Provinces north of the Jumna, and into the south, south-east and west of Oudh. Its advance is mostly barred, below Mirzapore, by the eastern up-current, which similarly checks its progress in the north of Azimgurh, Goruckpore, &c. In the Agra district, the great mart is that city itself, and there prices have varied according to season, stocks, and quantity, from Rs. 4 to Rs. 4-10 a maund. In Muttra, Muttra itself, Sheregurh, Chatta, Binderabun, Maat,

Area of distribution, and prices at leading marts near and below Line.

Mahabun, and Hatras (in Allygurh) are all more or less important marts; and in these, prices seem* to have varied from Rs. 3-11 to Rs. 4-5 per maund. The total stocks in hand at all the Bhurtpore works on the 1st April 1868 only amounted to

Stocks in hand atthe works.

Muttya.	Kuteela.	Puneah.	Total.
Mds.	Mds.	Mds.	Mds.
8,599	204,768	64,436	277,803

very little, if at all, in excess of a three months' supply for us. There has, during the past year, been a decrease in our imports of this staple, of nearly 6,000 tons, as compared with the corresponding 12 months of 1865-66, and of no less than 11,000 tons, as compared with the same period of 1866-67. The primary cause of this falling-off unquestionably has been a shortness of production, the out-turn of the past year having fallen short of that of the previous one, by some 14,000 tons. This was due, partly, to unfavorable weather, periodical showers throughout a season that in Upper India is usually rainless, but partly, also, to other causes, which, combined with a decrease in manufacture, raised the average price of the *total* sales at the works, for the year, from 6 annas and 6 pie, at which it stood for 1866-67, to 8 annas and 4 pie in 1867-68. The prospects of the Balumbha trade, as matters now stand, appear to me by no means cheering. This salt is fortunate indeed, in traversing no intermediate Native state, and having, therefore, no regular dues to pay *en route* to our marts, except the Government duty; but other influences, adverse to it, are slowly hampering its production, and cutting at the very root of its commerce. Wages of labor, cost of kunkur, hire of carts, have all increased greatly, so as more than to double the actual cost of production, while the prices of salts, produced elsewhere, have not increased in a similar proportion. Pucca roads and other public works, in progress in Bhurtpore, have chiefly contributed to this, and unless endeavors are made to introduce improved methods of manufacture, or improved means of conveyance, a gradual diminution of the trade seems probable. As it is, numbers of the works are idle (*bunjur* or fallow as the people term it), and the manufacturers, in many places, complain that, whenever they find a good kunkur mine, the Revenue Tehseeldar immediately takes possession of it for his road works; that their workmen are carried off to work on these roads, and that, generally, they suffer from numerous vexatious restrictions, while any complaints they prefer, although invariably attended to, are so (having to go up to the Regency Council) only when the season having passed away, the injury has become irreparable. This is probably a more or less exaggerated statement of their case, but be the causes what they may, the conviction is scarcely to be avoided that, unless some fortunate change should occur, the salt manufacture and trade of Bhurtpore has seen its palmiest days.

Decreased consumption.

Prospects of the trade.

78. The Sooltanpooree salt is made in ten different saline tracts or surrs (the most distant of which are about 14 miles apart), situated south-east of Delhi, at distances of from 26 to 40 miles from that city, in the Goorgaon and Rohtuck

Sooltanpooree.

* These prices and those given elsewhere are the result of our own enquiries, in many cases made personally by myself. They will not always be found to correspond with the revenue price currents, but this cannot be helped. Ours, in every case the result of careful enquiries by European officers, are, I think, reliable, so far as they go.

districts. Three of these tracts have, since the early part of the present century, been situated in British territory, but the remainder only came into our possession after the mutiny, five having, till that time, belonged to the Nawab of Jhujjur, and two to the Nawab of Furrucknugger. As these works are in our own territory, and under our immediate surveillance, and as theirs is a growing trade, which promises, with a little assistance, such as, I hope, will not be denied them, to make their produce the most important of all our imports; I proceed, at the risk of being tedious, to exhibit, in a tabular form, a number of facts connected with them, some of which were collected for me by Mr. K. B. Mackinnon, Assistant Patrol of Bhoondsie, subsequent to my visit.

Name of "Sure" or Saline tract.	Prior to mutiny belonged to.	Approximate area of saline tract in acres.	No. of Wells. In use.	No. of Wells. Disused.	No. of Wells. Total.	Average depth to water. In ft.	Average depth of water. In ft.	No. of sets of pans now in use.	No. of pans.	Sales from 1st May 1862 to 30th April 1863.	Sales from 1st May 1863 to 30th April 1864.	Sales from 1864-65.	Sales from 1865-66.	Sales from 1866-67.	Average 5 years.	Amount of Hakimee Tax paid.
Sooltanpore ...	Jhujjur	350	39	12	51	14	17½	70	435	51,355	53,901	72,352	77,891	1,08,106	72,601	6,000
Sadrana ...	British	30	21	5	26	8	20	23	284	19,213	19,756	42,652	62,645	60,805	39,014	Nil.
Saidpore ...	Do.	15	6	6	12	7	17	8	60	2,627	4,074	12,256	11,238	7,601	7,559	Nil.
Mahmoodpore...	Do.	16	15	10	25	10	19½	14	138	10,401	13,153	25,596	18,876	23,700	18,345	Nil.
Mobarickpore...	Jhujjur	550	72	18	90	18	20	120	1,308	1,01,078	2,05,491	2,63,599	2,11,801	2,85,010	2,25,396	16,600
Busseerpore ...	Do.	550	49	26	67	16	17	60	535	33,379	1,19,645	1,19,341	1,15,418	1,14,085	1,11,375	12,230
Balpore ...	Do.	20	16	1	17	17	19	18	240	20,941	23,418	21,678	19,411	50,188	27,127	825
Kaleeawas ...	Do.	4	3	...	3	10	16	4	33	1,632	2,878	642	5,230	6,612	3,389	155
Zahadpore ...	Furruck nugger.	20	15	5	20	16	21	59	602	33,490	54,911	60,035	30,376	32,075	40,187	1,825
Sylana ...	Do.	10	10	1	11	16	20	15	104	12,757	15,009	16,111	4,912	6,175	10,995	320
Total ...		1,565	246	84	330	Average. 13·5	18·7	390	3,790	4,01,873	5,11,936	6,24,312	5,47,797	6,04,357	5,50,058	37,955

Manufacture and cost.

The manufacture of Sooltanpooree salt is exclusively from natural brine, derived from wells. The brine is evaporated by solar heat, in shallow chunam lined pans, which vary in extent from 200 feet by 60 feet to only 60 feet by 40 feet, and in depth from 10 to 12 inches. To each well is attached one or more sets of pans (called here an "*agur*"), each set consisting, on an average, of 10 pans (or *kyarees*) so arranged that there is a slight fall from each pan into the one next beyond it. The pans in which the chunam, yearly freshly laid in them, is everywhere nicely smoothed, have their floors levelled as carefully as possible, except near the outlet, into the next pan, where there is a slight depression so as to encourage the flow of the water.

When, after the annual repairs, which take place about February,* the pans are all in order, the highest is filled with brine from the well, and the water allowed to stand there for one, two, and even more days, according to the season and weather; the period being shorter in the hot, and longer in the cool weather. After thus standing, the water is run into the second pan, the first being refilled, and so on as explained in the case of the Bhurtpore works, until the water reaches the last pan but one, and there it is allowed to remain, receiving perhaps one or two accessions from its predecessor, until a commencement of crystallization is observed, when it is at once turned into the last pan, and crystallization allowed to proceed. This is the most delicate part of the process, if the best salt is to be made, and at the same time none wasted; the progress of the deposit (for the crystals form on the floor of the pans) must be closely watched. Up to a certain period nothing but edible salt is deposited; after that other earthy salts begin to drop, and the edible salt must then be at once removed, and the mother liquor, of which no further use is made, run off; otherwise, especially in some surrs, the gross products of evaporation, taken as a whole, are bitter and uneatable. Not more than 8 inches depth of brine, at most, is run into the first pan; and that is reduced to half that quantity, or even less, before it reaches the 9th. The process of manufacture varies much in details: in some surrs, the water is not detained, as I have indicated above, in the last pan but one, but allowed to run on, at once, into the last. The former course, however, is more usual. At times, it is said that, in some works, the *whole liquid* is allowed to evaporate, and the gross deposit taken as salt. This may account for the inferior quality of some of the salt examined, but this process is only *possible* where the brine is exceptionally pure; in most of the surrs it would spoil the salt altogether. In the colder weather, the salt rarely crystallizes under a month, from the date the brine is drawn, and it often takes far longer, but in the very hot, dry weather, when a good west wind is howling over the pans, 10 or 12 days suffices. Of course the brine gets full of leaves, straw, dust and feathers, &c., and so, just before it is going to set, the workmen carefully skim the whole surface of the water (taking care not to disturb the sediment), with some flat curved instrument, usually a cow's rib bone, with which they succeed in getting rid of all the lighter impurities; while most of the heavier are left behind, when the water is run into the formation pan. The quality of the brine varies surprisingly in different wells, and at different seasons, in the same wells. As regards the latter, during the rainy season, and for a month or so after, the water is barely brackish in wells that in the warm weather (and then *all* the wells are at their best) yield excellent brine. The proportion of salt in the water varies from 1 chittack to the maund, or about 0·16 per cent., the lowest workable rate, according to the makers, to as high they *assert* (I could find none such, but I was there in the cold weather) as 1 chittack in $2\frac{1}{2}$ seers or 3 per cent.!! The average depth of water below the surface, in March, varies in different surrs, from 7 feet to 19 feet. The salt, when removed from the pans, is just stacked in circular, bell-tent-like heaps, about the works, and, when fresh, is stamped with a Government seal, all over. A few days hardens the exterior into a crust, which bears our seal everywhere, and which is not only sufficient to prevent any salt being removed without detection, but also to protect the heap

* In many works little is done, after the rains, until after the repairs, but in some years, when there is a dry, hot autumn, a great deal of salt is made in September, October and November.

against all ordinary rains. This salt fetches a better price when fresh, and is never pitted, if the owner can help it, until the rainy season, when, perforce, any stock remaining unsold, has to be pitted. Although the process of manufacture is essentially the same, as a rule, everywhere, and although the salt has even locally but one name, its qualities differ vastly, according, chiefly, to the "surr" in which it is made. The "*pulla*" (here of 3 maunds 30 seers British) of Busseerpore salt, for instance, sold in January 1868, for Rs. 2-3, while that of Zahidpore was selling at 11 annas and 6 pie. The real cost of production cannot be ascertained, the mass of the workers are agriculturists during the rains, and the better portion of the cold weather, and only turn to their pans when their fields no longer need their labor. The cattle, that till their lands, draw the brine, and the labor they employ is mostly that of their own household. They work on capital borrowed at exorbitant rates, and while, in 7 surrs, they pay the Hakimee Tax (which represents the State share in Bhurtpore, the right to receive which was here farmed out for 10 years soon after the mutiny), in the others, where the saline tracts are regularly assessed, like the rest of the zemindaries in which they are included, the workers pay a rent or percentage to the Lumberdars. This Hakimee Tax, owing to the power of interference which it gives to the contractors, ostensibly with the view of obviating collusive sales, causes many difficulties, and has, at times, been converted into an instrument of much petty oppression; but as it is understood that the current lease, which is soon to expire, will not be renewed, more need not be said of it. The shortness of the stock in hand and the briskness of demand caused extraordinary fluctuations in the sale price, which, in April 1867, averaged 3 annas and $8\frac{1}{4}$ pie per maund all qualities, good and bad; and in January 1868 averaged 5 annas and $0\frac{1}{2}$ pie per maund, for the same. Some of the inferior qualities, at times, sold as low as annas $2\frac{1}{2}$ a maund, and some of the superior as high as 10 annas a maund, at the works! The total sales and production at the works, of all qualities, for the past official year, *and the previous corresponding* 12 *months* were as follows:—

	Sales.		Out-turn.	
1867-68... ...	7,20,934	Mds.	5,76,908	Mds.
1866-67... ...	7,73,829	„	6,72,902	„

Lines of import and means of transport.

This salt crosses solely in the Delhi Division, by our Jhujjur, Gurhee-Hursroo, Badlee and Dhasa posts. A quantity of it is consumed in the country south of Delhi, but the major portion finds its way to that city itself. It is carried, here, almost exclusively by carts. The cost of carriage, from the works to Delhi, averaged, during the past year, 4 annas and 10 pie per maund; and the cost, therefore, of transport, as far as Delhi, of that portion of this salt that went there (say 24,000 tons) was no less than Rs. 1,80,000. The rates were, however, unusually high; from 2 to 3 annas a maund being the common charge.

Sooltanpooree enjoys an entire immunity from all transit duties; made in British territory, through which alone it has to pass, to reach its most distant marts, its price can never, as in the case of so many other descriptions of salt, be dependent on the will of a Native ruler. Where Sambhur, Puchbuddra, Bhurtpore, Deedwana, and other important staples are concerned, the

fiat of a foreign chief might double the price in a day and create a serious dearth of salt. Sooltanpooree, like Pindadun Khan, and Kokan, we have entirely in our own hands, and it is to these, first and foremost, that we should, it seems to me, afford facilities of transport. Till 1865-66 the area of distribution of Sooltanpooree was almost confined to the Eastern districts of the Punjab, the upper portion of the Doab and Rohilcund, but the progress of the Railway began to open to it new marts, and during the past year, it has ranged side by side with, and has undersold Balumbha, as low down as Mirzapore, and far into Oudh. Some 9,000 tons of this salt was sent down by rail from Delhi. Some (a quantity estimated at 3,000 tons) went down, it is said, by boat, and the rest was distributed, as usual, over its old area. In Delhi itself the price varied from Rs. 3-5 to Rs. 4-4 per maund. The simultaneous rise in price in Balumbha and comparative exhaustion of stocks of Sooltanpooree greatly enhanced the rates of this latter also. At the close of March 1865-66 the stocks of Sooltanpooree amounted to nearly 3 lakhs of maunds; at the close of 1866-67, these had fallen to less than 2 lakhs, and the past official year closed with considerably less than ½ a lakh of maunds in store. A slight decrease in the import of this salt is observable in the past year, as compared with its predecessor, but this was due solely to exhaustion of stocks; most, even of what little remained in store at the close of the year, being more or less inferior and unsaleable. Two years of unprecedentedly great demand, one of which was eminently unfavorable for production, naturally absorbed all existing supplies, and reduced stocks to their lowest limits, and towards the end of the second year, resulted in a diminution in trade; there being little or nothing left worth trading in. The prospects, however, of the trade are excellent; kunkur, the expense of which is so seriously injuring the Bhurtpore works, is here cheap and plentiful in the immediate neighbourhood of the works. A metalled road (though by no means the best line that could have been selected and in no way a sufficient aid) will soon, it is believed, be completed to the centre of the works. The, at times, oppressive, always unsatisfactory Hakimee Tax, will cease ere long, we understand, to be levied, or its realization will be entrusted to us, who have the deepest interest in the manufacturer's prosperity. There has been for years a steady increase in the deliveries from the works, yet even now half the tracts are not utilized, and at the parts that are in work, nearly double the present quantities can be easily turned out, except during exceptionably unfavorable seasons. The brine seems inexhaustible; works have been in operation for the last 200 years, at any rate at one of the surrs, and no deterioration is observable. One of the very best brine wells is certainly over 50 years old, and probably much older. Where wells have been abandoned, it has rarely, if ever, been on account of exhaustion, but because, from their first sinking, their yield was inferior, and such as could only be worked to advantage in exceptionably hot dry seasons. The salt, despite a temporary check, consequent on all the old inferior stocks being fraudulently thrown into the market by down-country dealers, at the price of the better kinds, is daily growing in favor: no one doubts that the works could easily turn out 50,000 tons a year, and no one doubts that *they will* turn this out, if only proper facilities for conveyance to the Delhi Railway station be afforded them. *Vide* (para. 96.)

Area of distribution and price.

Stocks in hand

Decrease in imports.

Trade prospects.

79. Although Sambhur salt stands at present only third on our list with reference to the quantity imported across our Line,

Sambhur.

it is undoubtedly the favorite staple of Upper India. It is manufactured at a salt lake* from which it takes its name, on the borders of Jeypore and Jodhpore. This lake, for the most part,

* I here append a note of Captain J. Blairs on the traditional origin and general appearance of the lake, which may be interesting; the story was told to me at the lake much as he tells it, and his description of the general aspect is sufficiently correct: "To the formation "of the lake a curious Hindoo tradition is attached. The chronicle relates that about the "year 540 A. D., there lived at Sirthulla, a village situated a few miles from Sambhur, "a Chohan, named Manik Rai, whose employment it was to attend his grandmother's cows, "whilst grazing in the dense forest, which then flourished on the plain now occupied by the "bed of the lake.

"The old lady, observing that a particular spotted cow always came home dry, taxed her "grandson with drinking the milk. He indignantly denied the charge, but at the same time "determined to discover the cause of the cow being thus milkless. Accordingly, he watched "her during the next day, and noticing that she separated herself from the herd, followed her "closely. In the centre of the forest there arose an abrupt hill, on which stood a shrine of "Devee. To this the cow proceeded, and having arrived there, milked herself into the 'lotah' "of the attendant priest, who himself was sitting absorbed in contemplation of the Deity. "Having conducted herself in this pious, though extraordinary, manner, the cow returned "to the herd, but Manik Rai remained behind, and stole up unperceived close to the holy man. "After a while the ascetic removed a charm from his mouth, and placing it on the ground, "commenced drinking the milk. Manik Rai instantly picked up the amulet, and by its "virtue visited in spirit the 24 sacred places of pilgrimage in a moment; and as soon as the "priest had finished his draught, presented the charm.

"The holy man, now observing the stranger for the first time, was surprised at his "honesty in returning the priceless amulet, and begged him to keep it. Manik Rai, however, "refused, on which the priest directed him to go to the Devee, who would be kind to him.

"Obeying the ascetic, Manik Rai reverently approached the shrine, on which the goddess, "instantly creating a horse, bade him mount and ride, but warned him to abstain from looking "backwards. In accordance with the Devee's injunctions, Manik Rai mounted and rode, "taking a somewhat circular course, and with wonder and amazement beheld that, as he "passed along, the forest disappeared, and became a plain of gold and silver. By evening he "had proceeded about 24 coss, when a branch having caught his turban, he turned to "disentangle it, forgetting for a moment the goddess's prohibition: instantly, the horse stopped, "and refused to go on further.* Manik Rai had no choice but to return home.

"As the sun arose and displayed the unwonted and gorgeous spectacle of a vast plain "of gold and silver glittering and gleaming under the bright morning rays, the inhabitants "of Sirthulla were awe-struck, and, collecting in fearful knots, sought from each other the "meaning of the strange sight. Manik Rai then related his adventure of the previous day, "on which the sages of the community determined that he should be deputed to the Devee "to beg her to take back her gift, as it assuredly would be the cause of war and of "destruction to the village.

"Manik Rai accordingly returned to the shrine, and delivered the message, to which the "goddess replied, that from real silver the plain would be transformed into one of *kutcha* "silver; instantly it became a vast sheet of water.

"The inhabitants of Sirthulla remained ignorant of the value of the lake till some time "after, when the Souba of Muttra, who was passing through Sambhur *en route* to the sacred "lake of Poskur, noticing the salt crystals formed by its water, communicated its worth to "them; and in order that he might work the lake, had himself transferred from the charge "of the Muttra district to that of Ajmere. The present Canoongoe of Sambhur claims "descent from this personage.

"Such is the tradition, which is fully accepted and believed alike by the Hindoo and "Mahomedan population of Sambhur and the surrounding villages, as well as by the Bun-"jarahs, who crowd there in great numbers, with their pack-bullocks, to carry away the salt "to all parts of India. The shrine of Devee stands on a rocky hill, which juts out into the "lake, and is amply supported, with a large number of priests, by the offerings of her "votaries. Except during the rains, or immediately after, the first view of the so-called "Sambhur Lake cannot fail, in most instances, to disappoint the visitor, for an examination "of the maps of the country leads to the expectation of a large expanse of water reaching "to the horizon. But, on the contrary, as we come, at any other season, to stand on the "low sand ridges which bound the southern border, we see stretched before us, as it were, "a vast sheet of snow, with only pools of water here and there, whilst the inner edge of the "plain is marked with a net-work of narrow paths, reaching far away into the snowy surface.

"On moving forward from our position, we first pass over a belt of about half a mile of "black dry mud, on which, we learn, salt is collected when the water in the lake is high "enough. Here, too, we observe conical mounds, seemingly of earth, about 15 feet in "height, dotted at intervals along the margin; but on approaching them we find they are "heaps of salt ready for exportation. In the vicinity are rude guard houses, about which "a few armed watchmen are sauntering, who will gladly show the way further on amongst "the labyrinth of paths which stretch like antennæ, into what is locally termed the 'sumund,' "or ocean. At length, having traversed the intervening space, we arrive at the salt region. "We are informed, however, that the white crisp efflorescence now under foot, which looks "like a stratum of frozen snow, is not the true salt, which is to be found further in; and our "guide, selecting one from among the numerous pathways around, leads on, carefully enjoining "us to keep to the middle of the path, and not trust ourselves on the fair, though treacherous, "surface on either side. Notwithstanding the injunction, one of the more curious of the "party steps slightly to one side, and instantly, the salt crust breaking, he is plunged half "way to his knee in water and exceedingly filthy-looking black mud.

"Laughing at his mishap, we proceed continuously onwards, and now reach places from "which the salt crust has been removed and collected in small heaps, exposing foul water "about four inches in depth, covering still more foul mud. A little further on, we "reach the extent of our path, and gaze on what might well represent an Arctic scene.

* This spot is marked by the village of Asapoora, which stands on the eastern extremity of the lake.

a shallow sheet of water extending, some years, in the height of the rains, to a length of 18 miles, with a breadth varying, in places, from 10 to 3 miles, and contracting, in extremely dry and hot summers, to a pool, little more than a mile in length and less than half this in width, is distant, as the crow flies, its eastern shore 36 miles from Jaipore, its western 130 miles from Jodhpore. The lake's longer axis runs nearly east and west, and the deeper portion, which never dries up, and which is locally called the treasury (*Khazana*), is situated near the centre of the lake, nearly opposite a bold rocky promontory (Mata-ka Devee), which from about the middle of the southern shore runs out into it. The whole eastern shore of the lake, and the southern shore, as far west as the Mata-ka Devee, and indeed a little further, belongs to the states of Jaipore and Jodhpore in partnership. This portion includes the town of Sambhur itself (which may be described as standing at the south-east corner of the lake), Rotan-ka-talao, and 11 other salt-depôt hamlets. The rest of the shores of the lake belong exclusively to Jodhpore, which State has, on the northern shore, two famous salt depôts,—the first, Godha or (Goorha), about 6 miles *West* of the eastern extremity of the lake, and the other, Nabha, 5 or 6 miles further west, and therefore within 5 or 6 miles from the western extremity of the lake. Salt can only be made where the bed of the lake and its shores are clayey: where these are sandy, the brine percolates, carrying with it the salt, instead of evaporating and leaving the salt behind. It is to prevent this percolation that in Bhurtpore, Sooltanpore, &c., the pans are lined with lime; in other places, where clay is available, the pans are in clay. The southern shore westward of the Mata-ka Devee, and much of the western extremity, is sandy, and here, consequently, little salt is made.

Manufacture and cost.

Salt is made or obtained in three different manners at the lake—First, there are four large permanent pans, two at Sambhur and one at Godha, and one at Nabha or Nawa, which more resemble coffer dams than any thing else. Considerable spaces of the lake's bed, from 500 to 800 feet long, and from 200 to 400 wide, have been enclosed by a double row of rough stout piles, projecting from 5 to 8 feet above the soil. The rows are perhaps 4 feet apart, and the interspace has been filled in with straw, branches, and well rammed clay, so that each enclosure is water tight. A single sluice gate is kept, by which waters can be run in from the lake. When I visited the lake, all these enclosures stood high and dry, but when the lake is high, they are surrounded by from 3 to 4 feet water; and it is then, when the water is elsewhere too high for the adoption of other modes of manufacture, that these dams are chiefly used. From 1 to 2 feet of water are admitted into them, the sluice closed, and the enclosed water allowed to evaporate, depositing all over the bottom (which is of that same stiff black* clay that everywhere in the eastern portion of the lake forms its bed) a thick crust of salt formed of beautiful ½ to ⅔ inch cubical crystals. This crust is removed and more water let in, and so on, *as long* at least as the water of the lake remains high. In 1867, only one *crop* had

"On all sides a vast snow-like expanse stretches unbroken for miles. On the north-"west, hills are visible bounding the vision on that side, whilst opposite to the north, at dis-"tances of 6 and 9 miles, the white houses of Goodha and Nawa, on the margin of the "plain, glitter in the sunlight. Turning eastwards, the town of Sambhur, crowning a low "eminence, marks the eastern limit of the lake. To the west, rounding the bold promontory "of the Devi-ka-mata, the lake extends about 12 miles, making a total length of about "16 by a maximum breadth of 8 miles."

* At least it is black (and tenacious to a degree) when wet; when dry it is a pale earthy grey.

been obtained in the Sambhur dams, but in some years, when the level of the lake keeps high for several months, many successive crops are obtained. The Nawa and Godha dams are better situated, in some respects, than those at Sambhur, and at the former more crops are taken than at the latter. The area varies, but if we take one of the Sambhur ones, which encloses about 3 acres, and of which a good yield was estimated at 3,600 British maunds, the return would seem to be about 1,200 maunds per acre. The second method is this; all over the shallow eastern end of the lake, and, in a minor degree, towards Nawa and Godha, multitudes of rectangular plots of the lake's bed are enclosed* by low ridges, mostly formed by double rows of pegs, and with clay and straw filled in between. The object of these ridges is to detain the water, and compel it to evaporate there, instead of retreating, as it would otherwise do, along the shallows, but for these ridges, until the water of the lake generally had assumed a high degree of concentration, the brine along the margins, as it gained in density and long before it reached the crystallizing point, would roll away towards the deeper portions of the lake, being replaced by the less dense and therefore lighter brine of the body of the lake. There are hundreds of these rectangular enclosures, varying in area, I should guess, from 1 to 10 acres, but salt is not made in all of them. When the lake is very high, as some years it is, the outermost form salt, and the innermost never dry up at all. When the lake, on the other hand, is low, as sometimes for several successive years it remains, the outermost have either never been flooded in the rains, or have had too little, to make the salt, that could be formed in them, worth collecting, and then it is from the innermost ones that the harvest is obtained. Towards the close of the rains, it is decided *where* salt can be advantageously formed, and there the ridges are repaired and renewed; the extent of the work thus done being dependent on the stocks in hand, and the expected demand. As far as I could ascertain, to make it really worth working, there should be from 18 to 30 inches water over a plot at the close of the rains, of which from 6 to 12 inches should be left when, towards the end of March, the hot weather begins. Of course the yield of salt, so procured, (and it is thus, I believe, that, on an average of *several* years, most of the salt is obtained) varies very much. The poorest yield that I saw being collected was about 300 maunds, and the richest about 1,200 maunds to the acre. The third method is this: at certain places, particularly at Ratan-ka-talao, on the southern shore near the Mata Pahar, and between Nawa and Godha, on the northern, and nearly opposite the Mata, the lake water does not dry up until all the shallows have dried up, and little remains, but the central portion or khazana of the lake which they adjoin. Here, specially in dry hot years, as the water evaporates, a thick unbroken snow white crust of salt is formed; so hard when dry as to bear a horse's hoofs, and need pickaxes or paorahs to break it up. The quantity of salt, thus produced in some years, is incredible; a tenth portion of it is never gathered. At one place alone, near Ratan-ka-talao, when I was there at the end of March, there was, at the lowest estimate, 75 acres of this crust, actually in existence, though not quite dry; the net contents of which, when dried, I estimated by actual experiment, as exceeding 2,000 maunds British an acre, giving

* In some cases the places so enclosed have been lowered about a foot below the general surface, but this is not always the case. At times where the black mud is deep the depression, I am informed, (I myself saw no example) extends to several feet!

a total of at least 1,50,000 maunds. This space, the people assured me, was scarcely one-tenth of what, if no rain fell before the middle of June, might be expected to be covered by a similar and even richer crust, in this one locality. As a rule, the salt is all extracted before the water has quite dried off it. The laborers, men, women and even children, pile the salt in little heaps on the nearest dry spot, and receive wages in proportion to the quantity of salt they remove. They can earn from 8 annas to a Rupee a day. The work is said to be very hard; in the hot weather the salt crust, and the black soil immediately below it, becomes, after about 10 A. M., so intensely hot as to burn the feet, and people, I am assured, have at times died in past years, from burns received by falling off some of the ridges. The time for working in summer, when the chief collections are made, is from 3 A. M. to 9 A. M. The laborers cannot, it is said, work above two days in three, and even then, the legs and feet at times get terribly sore with cuts from salt crystals, and men are laid up for weeks at a time in consequence. At present, the traders are beginning to prefer the fresh white salt, but till recently the so-called "blue" Sambhur was preferred. When not bought at once, the salt is stored in huge conical heaps above high water mark, each containing from 10 to 30,000 maunds. What with the small portions of the mud, which the coolies leave with the salt in extracting it, and with the clay dust, that blows up and covers the heap, the contents of these heaps, after they have stood out for a rainy season, assume a slightly greyish or dingy bluish tint, which in past times greatly enhanced the value of the salt in parts of the North-Western Provinces. When quite fresh, the salt is either a dazzling white, or is tinted with a delicate rosy hue, said by some to be due to a microscopic fungus, and by others to a nimalculæ of the Volvox family. This tint disappears in the laboratory on the application of heat. The heaps, when thoroughly dry, form into a compact rock-like mass, which even the rains in no way injure, and which, when required for use, must be broken up with paorahs. In the case both of new salt, packed at once into the traders' sacks, and of old salt, which has to be profusely watered to separate the masses and render packing possible, a great deal of water remains, so much, it is asserted, that the allowance of 15 seers per maund for dryage is little more than sufficient to cover the actual subsequent loss of weight. The whole manufacture is conducted at the expense of the State. The salt is calculated and sold by boras, each of which contains 34* maunds. The quantity of salt extracted at Sambhur, &c., that portion which is in partnership between Jaipore and Jodhpore, varies from 12 to 16,000 boras *dry, i. e.*, from 4,08,000 to 5,44,000 maunds. The cost of this is Rs. 60,000 for labor, and about 20,000 for "Amlah" or supervising establishment. This is paid equally by the two Rajahs, but besides this, Jodhpore spends an extra Rs. 30,000 or thereabouts, in keeping up sowars, &c., which, as in no way directly or indirectly necessary to the salt manufacture, I shall not include in its cost. From what I could learn, the net average outturn is not more than 4,40,000 maunds, which cost altogether Rs. 80,000, giving us 1 Re. as the cost of producing 5½ maunds, or about 3 annas as the cost of one maund. The Sambhur salt is sold for Rs. 18-2-6 per bora, or, as nearly as may be, 9 annas a British maund. This is exclusive of transit dues, &c., levied by the Jaipore state, and is merely

* It is given, I find, at 35, by Captain Blair and others; the persons in charge themselves gave it as 34 *British* maunds, perhaps it is 35 of some other maund.

the cost price to the trader. The outturn at Godha and Nabha was, even on the spot, difficult to ascertain; it certainly does not exceed 14,000 boras or 4,76,000 maunds, and, I believe, averages about 4,08,000 maunds. The accounts of the cost of production are so intermingled with charges, clearly not debitable to the manufacture of salt, that I could form no estimate of the real cost. The salt is sold at varying prices; the best fresh salt is sold to traders; going north and east, at 12 annas a maund; the old salt at 10 annas. But to traders going to Saugor, and generally places to the south, only 6 annas appears to be charged. The revenue of the two Rajahs from the sale of salt would appear to be,—Jaipore, one-half share of the 16,000 boras said to be turned out at Sambhur, 1½ lakhs; Jodhpore, from the same source, 1½ lakhs, from Godha and Nabha, somewhat over 2 lakhs. Practically the Jaipore share is farmed out along with the right to levy certain transit dues to be noticed hereafter, for 2½ lakhs.

Lines of import and means of transport.

The lines of import of Sambhur are as numerous as its area of distribution is vast. It first begins to cross our Line at Hansie; west of that, the well-to-do classes, its chief consumers, prefer the Pindadun Khan or Lahoree salt. From Hansie eastward and southwards, it crosses the Line everywhere, in the Delhi, Muttra, Agra, Jhansie and Saugor Divisions. Below this Puchbuddra salt (of which even in Saugor six times as much is imported) virtually bars its progress, although a few maunds, from time to time, do by chance reach Hoshungabad. Let us take Sambhur at 5, and Nawa and Godha at 4 lakhs of maunds, and see how this is distributed; most of the Nawa salt goes north to the great mart of Bhewanee, and some also to Balsamand; from these sources the Hansie Division received, during the past year, 1,97,000 maunds. Camels are the only form of carriage as far as the marts immediately in rear of our Line, and generally, these go on, without breaking bulk, to marts, further north and east, such as Shamlee, Kurnal, Bagput, Paneeput, Meerut, Kythul, &c. The Delhi Division is supplied by Bhewanee and Rewaree; to the latter place, chiefly salt from Godha goes, but some is also sent from Sambhur. Delhi imported 70,000 maunds; here again camels being the only form of carriage. Ulwur and Rewaree are themselves computed to consume 30,000 maunds; and of the 1,00,000 maunds taken by these and Delhi, only about half should be debited to Godha and Nawa, the rest going from Sambhur. Of the northern produce the remainder, or at least ⅘ths of it, say 1,20,000 maunds, goes south to Sanganeer, Neemuch, Mundesore, Indore and Saugor, being sold, when exported in this direction, (I was informed) at a lower rate, *viz.*, 6 annas a maund instead of 10 annas and 12 annas a maund. The whole of this salt is carried by Bunjarah bullocks; much of it passes through Kishengurh, and, as far as I can ascertain, only some 40,000 maunds of it reaches British territory, crossing in the Saugor Line. Native states consume the rest, but in these it scarcely gets below an imaginary line, joining Oodeypore, Neemuch and Indore, the country south being supplied by Kansia and the Patree or Baragura salt, from the Runn of Cutch. The Muttra, Agra and Jhansie Divisions are supplied from Sambhur itself. Besides the 50,000 maunds, above noticed, as going from Sambhur towards Rewaree, Ulwur, Delhi, &c., Jaipore itself consumes some 20,000 maunds, and about 2,20,000 go towards Bhurtpore, whence Agra took, last year, roughly, 1,72,000, and Muttra 25,000 maunds. As far as Bhurtpore, to which they follow the main metalled road, carts, camels and bullocks,

all are employed at Bhurtpore, as a rule; the salt is thoroughly desiccated, and from thence it usually travels on carts into British territory. Some 2,00,000 maunds go south-east, not only supplying the northern and eastern states of the Central India Agency, but after crossing the Jhansie Line, Jhansie and Bundelcund as well. Roughly, 1,22,000 maunds crossed the Jhansie Line during the past year. The carriage employed is exclusively Bunjarah bullocks, and the routes adopted very various, the most frequented being *viâ* Jaipore and Dholpore, *viâ* Jaipore, Kerowlee, Gwalior and Duttia, and *viâ* Tonk, Bhoondee, Kotah and Goonah. The cost of carriage to the Hansie Division averages about 14½ annas a maund; to Delhi, from 9 to 11 annas; to Muttra and Agra, from 12 annas to 1 Rupee. Below this, where Bunjarahs are not only the carriers but the traders, no estimate can well be made of the cost of carriage; but they themselves (on what principle it is impossible to say) estimate it at about Re. 1-6 to Jhansie, and Rs. 2 to Saugor per maund. One thing is certain, *viz.*, that they would not carry *other* people's goods these distances for double these amounts. Sambhur at present labors under the grave disadvantage of having to pay transit duties in every direction that it moves. Beginning with Jaipore, besides the sale price of Rs. 18-2-6 per 34 maunds, or 9 annas a maund, shared equally between Jaipore and Jodhpore, the whole of the Sambhur exports have to pay a variety of transit dues to Jaipore, for permission, as it were, to pass through its territory.

Transit dues en route *through Native states.*

This salt for the city of		Jaipore pays	Rs.	4-4	a borah, or annas	2-0	a maund
„	„	Bhurtpore	„	11-4	„	5-4	„
„	„	Tonk	„	5-4	„	2-6	„
„	„	Boondee (and Harrowtee)	„	8-4	„	4-4	„
„	„	Siwaee Madopore (Saugor and Jhansie).	„	8-4	„	4-4	„
„	„	Gungapore (Gwalior)	„	8-4	„	4-4	„

The whole of these dues do not go to the state; the theory seems to be that every proprietor, through whose village the salt passes, has a right to a toll. In the "Khalsa" or state property villages, this toll belongs to the raj, while in villages that have been assigned as jagheers, to private persons, it is the perquisite of these latter (jagheerdars, as they are called); this toll or land rights is called "*bhoom*". Besides those there is the "*rahdaree*" or *bonâ fide* transit due, belonging exclusively to the state. Out of the Rs. 11-4 per borah, levied on salt exported to Bhurtpore, it appears that Rs. 7-4 is transit duty, the right to receive which is farmed along with that of receiving the half sale price, as above mentioned, to a contractor. The remainder Rs. 4, is "*bhoom*," half of which goes to the Maharajah, and the remainder to sundry jagheerdars. But we have not yet cleared the salt out of Jaipore territory. Besides the jagheerdars, whose rights were acknowledged in Major Morrison's time, and whose dues are included in the above Rs. 2, the Ranee and sundry other new jagheerdars have taken to levying "*bhoom*" on their own account, amounting, on the Bhurtpore route, to from Rs. 5-4 to close on Rs. 6 a bhora, or between 2½ and 3 annas a maund. The moment the salt leaves the Jaipore territory, other Native states and jagheerdars similarly tax. In Shekawatee (belonging to Jaipore) 2 annas is taken a maund on the Bhewanee salt. That going to Delhi has to pay from 7 to 10 annas a maund; Bhurtpore takes from 1 to 2 annas a maund; Kishengurh, 2 annas; Tonk, from 2 to 3 annas; Boondee, 1½ to 2; Kotah, 3 annas to 3 annas 7 pie; Gwalior, 5 annas

4 pie to 7 annas 4 pie; Dholpore, 2 annas 3 pie; Duttia, 1 anna 8 pie, &c., &c. Besides which chokeedaree, as much as can be extracted from the traders, is levied, wherever the goods halt for the night; while lastly, wherever the villagers are strong enough, on the pretence of "*dhool ooraee*," or compensation for dust kicked up, as large a fee as can be extorted (sometimes as much as ½ an anna per bullock, but more commonly one anna a score), is taken before the trader is suffered to continue his march. I have already indicated the area of distribution of this salt outside our Line. Inside of it east of Hansie and Umballa, Sambhur sweeps up to the foot of the hills, and is throughout the Doab, Bundelkund, Rohilcund, and Oudh, the favourite staple, finding its way even to Benares and Mirzapore, and the country round about. During the past year, the selling price at Hansie has been from Rs. 4-7 to nearly Rs. 5 per maund. In Delhi it has varied from Rs. 4-9 to Rs. 5. In Muttra from Rs. 5 to Rs. 5-12. In Agra, the price varies little, usually standing between Rs. 5-4 to Rs. 5-8. In Jhansie it varies from Rs. 6 to Rs. 8 a maund; and in Saugor, where it commonly stands between Rs. 6-4 and Rs. 7 a maund, it was selling for a short time during the year at over Rs. 10 a maund. At the close of the past official year (March being the time when the stocks are always lowest, the chief collections not having yet commenced), I found 14,000 boras in store at Sambhur and 9,000 at Nawa and Godha, in all 7,82,000 maunds. Although there has been (as will be seen from the table in para. 75) a slight falling off in the imports of this salt, during the past as compared with the immediately *preceding* 12 months, this was the result of local and temporary causes; there has been, on a review of the last four complete years, an increase during that period of over 43 per cent. in the quantity of Sambhur entering British territory, which has risen from 17,530 to 25,130 tons. This increase has been due to increased facilities of carriage afforded by the Railway; the imports of Delhi and Agra have been greatly enhanced without any corresponding loss in other directions. But for its liability to a sudden enhancement of price at the will of a foreign ruler, and to taxation by so many intermediate states, Sambhur might fairly be expected, when connected with Agra by rail, to command the Upper Indian market. True, it cannot be produced as cheaply as some other salts, but it is a better salt, is an old established favorite, and, as regards Upper India, has, where Kokan is concerned, the advantage of proximity. When dealing further on with the question of the supply of salt, I shall enter more fully into the question. I shall only add here that even with no further Railway advantages than those now possessed by it, the Sambhur trade seems likely to hold its own if not improve; while, once united by rail with the East Indian Railway, it would undersell Liverpool (when this is at Rs. 100 in Calcutta) for a full 100 miles below Jamalpore, and would, I conceive, with Bhurtpore and Sooltanpore, which would be considerably cheaper still, go far to ousting sea-borne salts from the whole of Behar. So far as my personal investigations enable me to judge, the supply of salt at the lake, though by no means exhaustless, is yet very great, and sufficient to supply any *probable* demand, (even when a Railway is running with sidings into the lake) for centuries to come. The salt is apparently a mere surface deposit, the remains of some internal sea, as some have thought; the washings of countless ages out of the surrounding Permian formation, as others have surmised. At present it is both held in solution in the water of the lake, and pervades,

Area of distribution and prices.

Stocks in hand.

Increased consumption.

Prospects.

in minute crystals, the whole substance of the black mud, that paves so large a portion of the lake's bed. I roughly estimated a superficial water area of 63 miles when I was there, and I believe that an average depth of 3 feet for the whole of this area is not too much to assume. It was impossible, owing to the depth and tenacity of the mud and absence of all boats, to get about the lake, and obtain samples of the water,* from different distances from the shore; but the samples I did obtain averaged roughly 8lbs. of salt to the cubic foot of water. This gives very nearly 526 millions of maunds; the black mud extends, according to my estimate, over an area of 75 square miles, and in each place where I tested, it appeared to exceed 2 feet in thickness. The people declare it to be over a yard deep nearer the centre, but even at 2 feet, this gives us nearly 4,182 millions of cubic feet. Now, this clay, when dried, weighs from 100 to 120lbs. per cubic foot, and on analysis, yields something like the following results :—

Silica	...	...	...	48
Chl. Sod.	...	...	...	20
Carb. Lime	...	...	...	12
Sulph. Sod.	...	...	...	10
Alumina	...	...	...	9
Iron, loss, &c.	...	...	...	1

One-fifth, therefore, by weight, as nearly as possible, of this mud is pure salt, but in its natural state $\frac{1}{3}$rd of the mud is water, so that the 4,182 millions of cubic feet of wet mud would yield only 2,788 millions of cubic feet of dried and *compressed* mud. Allowing only 20lbs. of salt to each such foot, we should have 697 millions of maunds of salt imbedded in the mud, and a total, for the lake, of 1,223 millions of maunds, or, roughly, 45 millions of tons. Our present imports are a trifle below 25,000 tons, and 1,00,000 tons (considering the competition Sambhur will encounter) seems the highest probable future maximum. Even at this high rate we have supplies for 450 years, and I believe that in my calculations† I have under rather than overstated the quantity. One point more requires notice, and that is the enormous quantities of sulphates and carbonates of soda lying in the lake and on its shores unutilized. There are in places crusts of "*myl*" or dirt, as the people term these unedible salts, bordering the lake to a breadth of from 50 to 200 feet, having an aggregate length of some miles, and varying in thickness, from $\frac{1}{2}$ to nearly 4 inches, portions of which have proved, on analysis, to contain from 40 to 80 per cent. of sulphate and from 5 to 20 per cent. of carbonates. The time must surely come for utilizing these, at present wholly neglected, and yet with a Railway once running near the lake, most valuable, products‡.

* Proper experiments should be made. I made the specific gravity about 1·12 far lower, I believe, than it has ever previously been estimated at, but this, of course, varies very greatly with the season, even in the main body of the lake, from which I failed to obtain samples; the specific gravity of sea-water is 1·027, of Dead Sea water 1·22, of the Great Salt Lake 1·17.

† These are necessarily of the roughest character; with only a week to spend at the place, a map on a by no means large scale, a prismatic compass, and a 100-foot tape, nothing better could be expected.

‡ Since the above was written I came upon a copy of a note on the Sambhur Lake prepared by Captain Holdich, R. E., in which he gives the specific gravity of the surface water of the lake at 1·351, and the amount of salt in solution 297 grains to 1,000. It is quite possible that we are both right in the matter, since in 1867, when he visited the lake, there was *very* much less water than in 1868, when I was there; and it was therefore, of course, in a far more concentrated state. His analysis of the mud of the lake, obviously did not go much into details, and so far as it goes, differs little from mine, except in asserting the presence of phosphate of lime, where I found carbonate. His analysis of the "intensely bitter substance" "Rae" or "mail" as chloride of sodium, with a trace of chloride of magnesium, I demur to. In a number of specimens from different places, the sulphate always predominated, the chloride rarely reached $\frac{1}{4}$th, and the carbonate was often present. Perhaps, however, we are referring by the same names to different substances.

It may not be out of place to mention that this association of chlorides, sulphates and carbonates is a common feature of inland salt lakes, and has been noticed in the Great Salt Lake of the rocky mountains, in the salt lakes of New Mexico, the bitter lakes of the Isthmus of Suez, the natron lakes of the upper part of the Delta, Lake Assal of the Somalis, Lake Loonar in Berar, and even in the Dead Sea, in which latter lake, however, the *predominant* salt is chloride of *magnesia.*

Bombay or Kokan salt.

80. Fourth in the list, with reference to the amount imported, stands Kokan, a sea salt made at the Oorun, Panwell, Matoonga and other salt works, within distances of 5 to 30 miles from the town of Bombay. Unlike the works at Sambhur, Deedwana, and Puchbuddra, which have had but few visitors, the Bombay works are often visited, and have been often described, and I shall, therefore, dispose of them very briefly. Alluvial muddy flats on the sea-board, liable to submersion at high tides, are selected; a large reservoir, to contain sea water, is constructed on the flat, by means of a more or less substantial mud embankment, the level of the bottom of the reservoir being usually somewhat lowered by the removal of earth for the embankment. Near this, another rectangular embankment is constructed, which is the "Agur" proper; the whole interior space so enclosed is carefully and nicely divided off into shallow rectangular pans ("*koondees*" as they are there called, kyaries as we should call them in Upper India); these pans at Oorun average about 30 feet long by 9 feet broad; but in other coast works, I saw them nearly ten times as large. They are separated by ridges, certain main lines of which are several feet broad, but which mostly are only just wide enough to work on. None of the pans are more than a foot deep, and all have the interiors very carefully worked and smoothed by hands, feet, and rammers, so as to be quite water-tight. As a rule, between the crystallization pans, enclosure, and the main reservoir, are one or more secondary reservoirs, in which the brine is allowed to concentrate before admission into the pans; but there are exceptions to this rule. The size and number of the reservoirs, primary and secondary, of the pans and of their enclosures, the thickness and height of the embankments, all vary according to local circumstances; all that is necessary is, that the top of the embankments should be above, and the bottom of the reservoir well below, spring, or, in some works, ordinary high tide levels, and that the rest of the works have their levels so adjusted that the sea water, admitted into the main reservoir at high tides, may afterwards be run thence into the secondary reservoirs, and thence into the crystallization pans. From 3 to 9 inches of the brine, according to the degree of concentration which it has undergone in the secondary reservoirs, are admitted into the pans, and there suffered to crystallize. The time occupied in this, and even the processes adopted, vary at different seasons and in different works. In some, the brine, as admitted, is suffered to evaporate at once; the thin dry crust so formed is scraped up and piled on the intervening ridges, after which a fresh supply is admitted and similarly treated. In others, when crystallization is nearly complete, but before total evaporation has taken place, a fresh supply of brine is admitted, and *after* this, total evaporation is permitted. In others, a third supply even is let in before the products are removed. All the salt so obtained, however (*viz.*, by removal after total evaporation), appears inferior to that which is removed, as is very commonly done, from the bottom of the pans before all the mother liquor has disappeared. As for the time occupied in evaporation it varies from 8 to 30 days, according to wind,

Manufacture and cost.

temperature, &c. The produce is suffered to dry on the pan ridges for a few days, and is then stacked in heaps on some convenient neighbouring spot, well above the monsoon flood level. In most of the works that I saw, the salt was stacked on one of the main embankments, and many of the heaps had a light thatch over them, the only protection they get even in the rainy season. Of course the exterior surface soon becomes hard and crusted, so that even the light thatch is generally a sufficient protection. The cost of production, all expenses included, in the neighbourhood of Bombay, at any rate, seems very trifling. An agur, containing 200 evaporation pans, each with a superficial area of 270 square feet (total 200′ × 270′=54,000), with reservoirs, &c., cost, it was estimated at Oorun, all things included, Rs. 5,000. Such an agur might, it was said, be expected to yield 20,000 maunds on an average; it might often yield much more, sometimes much less; the results are most variable, and the business a speculative one, but this the people on the works considered a fair mean. The trader, having completed the works, makes them over in perfect order to the manufacturers, residents of the neighbourhood, who get no advances, but receive, on its sale, half the price of all the salt they make: for all internal repairs (and, in a few works, for *all* repairs), the manufacturer is answerable, the trader being customarily responsible for making good all damage to the main embankments. Salt is sold by the "*ana*," which varies, at different works, from 70 and 72 to 80 maunds. The average price at the Oorun works, at the close of the past official year, was Rs. ¾ per "*ana*," or about one anna a maund. This, on 20,000 maunds, would give the trader Rs. 625 for his half share, which would be 12½ per cent. on his expenditure. Of the manufacturer's share, I was informed that about one-half was profit, the rest fair wages, at Bombay rates, for his labor. Admitting the 12½ per cent. to be a fair and full return for capital, the real cost of production cannot, under the above circumstances, exceed 9 pie per maund. This, however, was not the best quality; for the best the price at times runs up to Rs. 9 an "*ana*," and enormous profits are made; while, *per contra*, at times no salt can be made, or new works are demolished by a flood or cyclone, before a maund of salt has been sold. The supply seems as inexhaustible as the sea that furnishes it. Oorun alone turns out some 60,000 tons a year, and although a good deal of the salt made, and exported, is somewhat inferior, I have had specimens from the Matoonga works of a very high degree of purity. Kokan only reaches us by one route, *viz.*, by the G. I. P. Railway. Loaded at the Boreebunder and Kullian Stations, the former at the town of Bombay itself, the other 33 miles higher up, at what may be called the first mainland station of the Railway (at both of which we have officers, who weigh the salt into the wagons, and receive our half duty Rs. 1-8 per maund on it), Kokan runs up by rail to the Bhoosawul Junction, where that portion, intended for Hoshungabad, branches off to Khundwa, on the Jubbulpore Line, and that for Berar and Nagpore takes the latter line.

Lines of import, means and cost of carriage.

Budnaira (near Oomraotee) seems the great depôt for this salt in the Berar; salt is loaded in the wagons at Kullian (to which it mostly comes from the works in boats) at a maximum* average

* Say 80 maunds on the average ... ... Rs. 7 8 0
Freight by boat ... ... „ 5 8 0
Unloading ... ... „ 0 8 0
Cartage from wharf ... ... „ 2 0 0
Lading on rail ... ... „ 0 14 0
} =Rs. 16-6, or annas 3·33 per maund. This is the trader's own account.

of 4 annas a maund, exclusive of duty, and from Kullian, it costs annas 9-6 to Khundwa, annas 11 to Budnaira, and annas 13-8 to Nagpore, per maund. Like the Sooltanporee salt, Kokan enjoys an entire exemption from all duty payments but our own; and it is this, coupled with its inexhaustibility of supply and cheapness, which gives it the great importance it possesses in my eyes. At present, its area of distribution within our line is limited, compared with what it must hereafter be, but, even now, the progress that it has made since the opening of the rail is most surprising. During the past year, its import has increased by 30 per cent. A few years ago, it never crossed the Bagh Nuddee, some 50 miles east of Bhundara, and 90 beyond Nagpore: during the past year it has made its way, driving the Madras salt before it, to Nundgaon, within 40 miles of Raipore. It has occupied nearly the whole country south of the Puchmurree and Saatpoora Hills, as far up as Chupâruh (beyond Seonee on the Trunk Road), Chindwara, and, it is said, Baitool. Beyond Khundwa, it is pushing up to Hoshungabad, and once the Great Indian Peninsula line opens through to Jubbulpore, it will flood the whole valley of the Nerbudda, Saugor, Dumoh, and Southern Bundelcund, and hold, I verily believe, the Jubbulpore, if not the Allahabad, market, against all comers.

Duty payments to Native states.

Area of distribution and prospects.

Deedwana.

81. Deedwana salt is made at the salt marsh of Deedwana, in Jodhpore. This place is distant some 30 miles, north-west, from the western extremity of the Sambhur Lake, and some 20 miles from the famous white marble quarries of Mukrana. The site of the salt works is an oval depression in the country, some three miles long, by one broad, and is surrounded by sand hills. In the rainy season this forms a shallow lake, in no part more than 2 or 3 feet deep, but this very soon dries up; for Major Beynon informs me, that even in December, when *he* visited the spot, there was no surface water. In a few years this source, so far as our import trade is concerned, will probably sink into insignificance, and I shall therefore deal very briefly with it. The soil of the marsh is not unlike that of the bed of the Sambhur Lake,—black and clayey. In this, as the surface water dries up, wells are dug, from 8 to 14 feet deep, at convenient distances, and round about the wells, numbers of rectangular solar-evaporation pans are formed in the clayey soil, the sides and bottoms being carefully kneaded and worked, so as to be smooth and free from cracks. The pans are small, from 10 to 20 yards long, and from 5 to 10 yards wide (a few are larger), and not above 8 to 12 inches deep. The brine is raised out of the wells by manual labor, with poles and buckets, just as at Buragur and the other Runn of Cutch works. The works extend over about one square mile in the centre of the marsh. The pans seem to require from 10 to 20 days for evaporation. The salt varies; the best is white, very fairly pure (averages 97½ per cent. na. cl.), but of small crystals. Those accustomed to its use *prefer* it to Sambhur, but it is in every way an inferior salt. Altogether, about 4½ lakhs of maunds are annually made here, of which fully 3 lakhs are exported into British territory. During the past official year, the manufacture was below par, and the stocks in hand, at its close, remarkably small. The manufacture of salt here costs far more than at Sambhur, as much more labor is required for it. Salt for local consumption sells, at the works, at from 2 to 3 maunds for the Rupee; the quality varies much, some of the worst sells at times as low, I was informed, as 2 annas 3 pie per maund, while the best often reaches 8 annas a maund, exclusive of the duty levied by the

Manufacture and cost.

Lines of import and means of transport.

State. This salt is only consumed in the immediate neighbourhood of its place of production, in the portions of Bikaneer, Jodhpore, and Shekawatee (Jeypore), lying between Deedwana and our Line, and in British territory, across our Line, in rear of the Hansie Division. Bhewanee, Bikaneer, and Rewaree, of which the first-named is by far the most important, are its great depôts. Its only means of transport is by camels, except, indeed, between Bhewanee and British territory, where carts, mules and donkeys are also used. Of our total imports during the past year, of 304,000 maunds, only 1,000 maunds were imported by the Sirsa, and 1,000 by the Delhi Divisions, the whole of the rest pertaining to the Hansie Division. The cost of carriage to various parts of our Line varies from 9 annas to Rs. 1-4; the latter high rate being only charged to part of the Sirsa Line, and the 9 annas to part of the Delhi Line. The great bulk of the salt costs from 12 annas to a rupee, for carriage to the Hansie Line. The Jodhpore duty, taken at the works, varies, according to some not very intelligible system, from about 2 annas to 4 annas a maund. Bekaneer and Shekawatee levy from 1 to 2 annas a maund each, and numerous petty chieftains, through one or other of whose estates all the most frequented routes lie, also exact transit dues, aggregating an anna or two a maund. At the leading marts, below and near Line, the price varies, according to season and quality, &c., from about Rs. 4-4 to Rs. 5-2 a maund. Its area of distribution, outside the Line, I have already indicated; inside the Line it rarely, if ever, travels outside the space north of our Line, enclosed by the trunk road from Delhi, *viâ* Umballa; and Loodhiana, to Ferozepore; Rutteea, Futtehabad, Hansie, Jheend, and Kythul, being, I was informed, some of its principal marts. The stock said to be in hand, in April, amounted to about 38,000 maunds. The consumption* of this salt, confined to a narrow area, within which it is at present the cheapest fairly good salt, has hitherto varied but little. There has been a slight decrease during the last two years, but whether this be really due to any invasion of its area of consumption by Lahoree and Sooltanpooree, or solely to a temporary fluctuation of trade, it is impossible to say. Hereafter, I entertain no doubt that a very considerable decrease will take place. This salt is not likely to have any new facilities for transport afforded it; it is in every way inferior to Sambhur, and its production costs more; equally good salt, in my opinion, can be made at Sooltanpoor fully as cheap. South-east and north-east, therefore, all extension is barred; while from the north, with the opening of the Railway through the Punjab and to the mines, Lahoree salt will come down at a price defying competition. If the various measures, which I have further on, advocated, for facilitating the import of Lahoree, Sooltanpooree, Sambhur, &c., salts, be, as I believe they ere long *must* be, adopted, our import of Deedwana salt, will, I apprehend, almost, if not

Duty payments to Native states.

Area of distribution, price, and stocks.

Decrease in consumption. Trade prospects.

* I mean the consumption of the salt itself *pur et simple*, because an artificial preparation of it has a very wide range. I refer to the so-called black salt, given to men and cattle, as a purge and tonic, and which is made (as follows) at Bhewanee; Half a seer of *Sujjee* (carbonate of potash), 5 chittacks of *Aunlah*, (the dried fruits of *Emblica Officinalis*). 6 chittacks of *Buhera* (the dried fruit of *Terminalia belerica*, a tonic and astringent and basis of many dyes), and 6 chittacks of *Hurk kalan* (the dried fruit of Terminalia Chebula, a deep black dye, used for making ink and a powerful cathartic) are pounded up together and added to one maund of Deedwana salt. About 30 seers of the mixture are placed in a half-baked ghurra, plastered inside with a coating of cow-dung and *chiknee matee* (a stiff clay); a little water is added, and the ghurra is set to boil; it is allowed to boil until all the water has evaporated, when, after allowing the whole to cool and harden, the ghurra is broken, and the ball of black salt extracted. From 10,000 to 20,000 maunds of this are yearly made at Bhewanee.

entirely, cease. A salt of no particular merit, no reduction in its present price can be looked for, while additional facilities of carriage, likely to be afforded to salts of superior excellence, will probably enable these to undersell it, even in its present stronghold, Hansie itself.

Puchbuddra or Kansia salt

82. The purest and most beautiful salt that I have met with in India, is made about four miles west of Puchbuddra, and some 36 miles south south-west of Jodhpoor, in the territory of this latter state. Puchbuddra itself is a dirty, ruinous little hamlet, deserted, almost entirely, during the hot months of the year, for Ballotra, some six miles distant, which is the nearest place where any drinkable water can be obtained, when the rain water ponds have dried up, or by evaporation become too unbearably brackish. The whole country, for many miles, in all directions, is a dreary, treeless, saline waste; even the rocky hills which, in Rajpootana, so generally enliven the prospect, are here only dimly seen in the distance. Proceeding to the works, some four miles west of the village itself, we traverse a slightly undulating sandy plain ragged with the *Muddar** *Koreel*,† stunted acacia bushes, and sparse, long-withered straggling grass, and come somewhat suddenly on a shallow valley, some two miles broad. North and south this valley, an ancient river bed, as I take it, extends for many miles, and in this, within a space of say two miles long, by three-fourths wide, the whole of these famous works are situated. Whether other similarly favorable localities for salt manufacture exist, higher up or lower down in this valley (which, as far as I traced it, was everywhere befrosted with glittering patches of snow-white efflorescence) no one seems to know; the present site is far more than sufficient for any existing demand, and no one has cared to waste labor or money in making a trial elsewhere; but from my own examination of the soil, I should say that at least two other rich saline tracts exist within a distance of a few miles of that which is now worked. Certain it is, that the whole country hereabouts is impregnated with earthy salts; that the Loonee river, which forms the southern boundary of the valley, everywhere in this neighbourhood, traverses a saline tract, and that for many miles, all well water is too brackish for animal consumption, or agricultural purposes. Agriculture here can scarcely be said to exist; just before the rains, one in ten thousand acres of the upland is *scratched*, and sown, and then, if the rain-fall (always very scanty) happens to be, for this part of the country, comparatively plentiful, it yields a meagre harvest of the poorer millets and lentils. The works are *sui generis*. Water is in this valley from 7 to 12 feet below the surface; the people dig out tanks from 400 to 100 feet in length, and from 60 to 100 feet in breadth, to a depth of from 10 to 12 feet. These soon fill, to a greater or less extent, with brine from the springs in the soil. If the water rises in the tanks so as to exceed $4\frac{1}{2}$ or 5 feet in depth, the excess is baled out. The 3, 4, or 5 feet of water, left in the tanks, is then allowed to dry up. In some seasons, and some situations, this takes place in a little over a year, while, in others, it requires 3, 4, or even 5 years, for the water to evaporate. Neither rule for, nor explanation of, this can be given; the people, from the highest to the lowest, fall back contentedly on the good-will and pleasure of the local goddess, as an all-sufficient explanation, and my own observations, though numerous, were yet far too limited, considering the

Manufacture and cost.

* Both Calotropis Hamiltoni, and Gigantia, a little further south near Deesa, Hamiltoni seems to have disappeared.

† Capparis spinosa.

complicated nature of the problem, to permit of any safe generalization. Certain obvious explanations are certainly untenable; for instance, it might be supposed that those pits which take longest to dry up are those in which the percolation from the springs is longest continued. Were this the case, it might be expected that the brine, continually receiving accessions for so long a period, would give the largest yield, whereas no rule of this kind obtains; the largest or the smallest yield may be indifferently the result of the evaporation of 12 months, or of 5 years, nor does locality explain it; the same pit behaving in the most widely different manners, at different periods. Nor has the age of the pit much to do with it; quite new and very old pits are equally successful and the reverse. Some explanation there must be, but, at present, it really seems a lottery. When the brine in the pits is found to have reached such a stage of concentration, that crystals readily form on the hand, when placed in it, large quantities of thorny bushes are thrown in to aid crystalization; and the liquid is generally observed to assume that deep reddish pink or brown tint, so conspicuous both in the deep Noh vats, and in large portions of the Sambhur Lake. The best salt forms in large, opaline, $\frac{3}{4}$ to even $1\frac{1}{2}$ inch cubes, is of extraordinary purity (some samples yielding na. cl. 99·87), bears carriage better, and suffers less from exposure to damp and rain, than any other description known to me. One of the pits will yield from 8,000 to only a few hundred maunds, according to season, size and state of repair of the pit, and (above all things, say the workers) the pleasure of the *Dea* Loci*. Sometimes from the same pit 3, 4, 5 successive harvests may be taken without expending any considerable labor on it, but generally, after the third yield, the pit, which gradually silts up, has to be re-dug, after which, apparently, the produce is as great as ever. It does not seem that pits are ever exhausted, or that any signs even of exhaustion have ever been observed, although one pit, at any rate, is known to have been in use for more than 100 years. The little rain that, in this rainless tract, falls direct into the pit, does no harm; it floats on, without diluting (the people aver) the concentrated brine, and soon evaporates, but if surface drainage breaks into the tank it destroys it for the time. Even in this case, however, if the pit be re-dug it will be as good as ever. A new pit, 150 feet long, 60 wide and 10 feet 9 inches deep, will cost Rs. 2,000 to dig, if the soil be what is called "*Moorud*," *viz.*, a rather stiff clay; but if the soil be what is locally termed "*Bekolla*," which is looser and more sandy, the cost will not exceed Rs. 1,500. It is noteworthy that it is only in those pits that are dug in the more clayey spots, that the largest crystals are formed. An equal weight of salt may be made in either situation, but the crystals, formed where the soil is "*Bekolla*," always run much smaller. A pit of the size above described *may* yield 5,000, and *may* only yield 500 maunds, without, as above remarked, any apparent cause for the difference, and what is more, without the yield of one harvest affording the slightest criterion for that of the next. Salt is made by the salt-workers at their own risk and expense, on advances made by traders. The local measure is the basket "*odhee*," which contains from 30 to 32 seers

* Some 250 or 300 years back, the story goes, two stone female figures were dug up at the site of the present works; for these, now known as the *Mata-jee*, a small temple was erected, and it is this lady (for both are supposed to represent the same goddess) who now rules the destiny of the salt-workers. It is only since the discovery of her statue that salt (they say) has been here manufactured; and now, if a man worships her earnestly and makes sufficient offerings, his pit proves a success, *provided* he don't dig more than 11 feet deep. If he goes deeper than this, *nothing* will appease her offended ladyship.

Jodhpore* weight, and in April, when I was there, 5 odhees or $4\frac{3}{4}$ British maunds were selling for the rupee. In the rainy season, when herbage and water become available, the traders come in numbers, and then commences what is known as the "*Peeth*," the time when demand is brisk. Then salt rises to its highest prices, and sells as dear as 3 odhees, or only 2 maunds 34 seers British, for the rupee. At times in the dry season, the people are glad to sell even 6 *odhees*, or 5 maunds 28 seers for the rupee. As the mass of the salt exported is sold during the *Peeth*, it would be perhaps safest to assume 5 annas a maund as the average price. Out of this price, the State takes $\frac{1}{4}$ as its share, thus leaving an average of only $3\frac{3}{4}$ annas to the manufacturers. About 5 to 6 lakhs of maunds are made and sold annually, it is said; but if this be true, the State is terribly defrauded, for the revenue derived from these works is said only to vary from Rs. 80,000 to Rs. 1,00,000, whereas the *State share* on five lakhs of maunds would, at the average price, be nearly Rs. 40,000, in addition to which the transit duty, levied at the works of 8 annas a bullock, allowing $2\frac{1}{2}$ maunds to a bullock (and this is a high average) would alone amount to one lakh. I propounded this question to the officer at the works, but could obtain no explanation; one and all agreed that the total sales in the year did not fall short of 5 lakhs of maunds, and with this, I was forced to be content. Puchbuddra, or, as it is called in Central India, "Kansia," is exported entirely by Bunjarah bullocks. A dozen camel-loads, it is true, went northwards to Sirsa during the past year, and in former times (*vide* Punjab Section, paragraph 14), a good deal used to go by this route, but now, practically, the whole produce of the works goes to Oodeypore, Gwalior, Saugor and Hoshungabad, &c., on bullocks. Of imports across our Line, say from 9,000 to 10,000 tons a year, $\frac{1}{11}$ths cross in the *Saugor*, and the remainder in the Hoshungabad Division. The lines taken by the Bunjarahs are very various, but the most important appear tc be *viâ* Palee and Oodeypoor, to Jhalra Patan, and thence either *viâ* Manoher-Thana, Seronj, and Koorwaee to Saugor; or *viâ* Dhoulaj and Bhopalpore to Sehore, and Bhopal—the former being by far the most frequented route. Besides the 8 annas a bullock levied at the works by the Jodhpore State, every other Native state through which this salt passes levies 1, 2, 3 or more annas a maund, to a certain extent, according, as far as I can make out, to the length of its territory traversed. These duties average about Rs. 1-6 a maund, as far as Saugor, and about Rs. 1-4 to Hoshungabad. The duties seem to be in some way proportioned to the difficulty of the route, for though numerous routes, to both Saugor and Hoshungabad, are traversed by the traders; it would appear from what they say, that those routes, on which less duties are leviable than the amount given above, are longer and more difficult; and that whether directly, in the shape of duty, or indirectly, in that of extra cost of carriage, practically these are the amounts by which the price of the salt is enhanced *en route*. Within our Line, the upward movement of Kokan has much restricted the area within which Kansia is consumed. This may be now said to be the country north of the Satpoora and Puchmurree Hills, from Hoshungabad upwards, the southern portion of Bundlecund, Saugor, Dumoh, and Jubbulpore. At Jhansie, where a little only is sold, it was fetching during the past year Rs. 6-4 a maund; at Saugor the

Lines of import and means of transport.

Duty payments in Native States.

Area of distribution and prices.

* A Jodhpore seer is 100 Bijesai rupees, which equal Rs. $98\frac{1}{8}$ British rupees. 30 Jodhpore seers, therefore, equal about $36\frac{3}{4}$ British seers, and 32 Jodhpore seers $39\frac{1}{4}$ British seers. The average is 38 British seers to the *odhee*.

price normally varies from about Rs. 6-10 to Rs. 7 (though, during the past year, it has sold as dear as Rs. 10), and at Hoshungabad the price seems to vary from Rs. 7 to Rs. 7-8. Outside our Line it is largely consumed in Oodeypore, Kotah, Boondee, Jhalra Patan, and other of the more northern of the Native states included in the Central Indian Agency. West or south-west of its place of production this salt never goes, being met by the almost equally fine Patree and Buragura salt, made on the borders of the Runn of Cutch, which, pushing eastward, parallel to the Kansia lines, more or less supplies the southern states of the Central Indian Agency. At the works, little if any stocks are kept. In April 1868, not more than 25,000 maunds were in store, and this, although it seems generally agreed that this salt improves by keeping. At present, the trade in Kansia, so far as British territory is concerned, seems doomed. Rail-borne Kokan, within two years, will, as far as I can judge, entirely displace it in the Central Provinces, the only place where its consumption is of any appreciable extent. In the event, however, of the Railway being constructed from Deesa *vid* Erinpoora, Palee, and Sambhur to Agra, Puchbuddra will certainly sell all over the North-Western Provinces for 1 anna only a maund dearer than Sambhur, and may, possibly, obtain a considerable share of consumption; under any circumstances, once it enjoys the advantage of Railway carriage, it will always be one important check on any arbitrary enhancement of Jaipoor dues, which, if raised only 2 annas a maund higher on Sambhur than they now are, would entirely turn the scale in favor of the purer and better Kansia.

Stocks and prospects.

83. Salumbha salt is made at the Salumbha, Noh, and eight other "*surrs*," or saline tracts, commonly known as the Noh Mehals, which are situated in the Goorgaon District, and are distant some 14 miles on the average, above Line, from the Sylanee post of the Delhi Division. The works are on a comparatively small scale; the salt produced at them is inferior in quality, and there seems no prospect whatever of any permanent increase in their importance. I shall, therefore, dispose of them briefly. The process of manufacture here differs in many respects from that adopted at the Sooltanpore works. In both, the salt is made by solar evaporation, in chunam-lined pans; but, whereas at Sooltanpore, these pans are but a few inches deep, in Noh they are from 30 to 40 inches deep; whereas in Sooltanpore, only natural brine, drawn from wells, is used, in Noh most commonly (as in the maunfacture of Kuteela at Bhurtpoor) the washings of saline earth, lying about the works, is added in greater or less quantities to the natural brine supplied by the wells. Again, the crystallization of the salt at Noh is aided, as at Bhurtpore, by the introduction, into the concentrated brine, of large bunches of thorny twigs and shrubs, and is not allowed to form of itself at the bottom of the pan, as is the case at Sooltanpore. Again, the same care about preserving different levels in the pans, that is observed at Bhurtpore and Sooltanpore, where all are shallow, and each is sufficiently below the level of the one that precedes it, and above that of the one that succeeds, to enable the whole contents to run freely from one to the next, throughout the series, to the last, is not here taken. The pans of a set are much fewer in number, and the brine, when it has reached a certain state of concentration in one pan, is commonly transferred to the formation pan by means of the "*Leuree*," or lifting basket, so commonly used for irriga-

Salumbha or Noh salt.

Manufacture and cost.

tion, where the difference of levels is slight. Lastly, the great depth of the pans introduces one great difference in the manufacture, and that is in the time in which any results are obtained. At Sooltanpore, in a good season, ten or twelve successive "crops" may be obtained, while at Noh, one is, I think, the average, and although two are sometimes taken, it happens just as frequently that the brine has been drawn more than a year from the wells before the salt is extracted. Long before the crystallization is complete, the brine has assumed a deep brownish red hue, is dirty to a degree, and smells most unpleasantly. The salt is extracted from the vats (for this seems a more appropriate designation here than pans) before the evaporation is complete; but even with this precaution, a certain quantity of other salts of soda, magnesia and lime, are deposited at the same time as the chloride, and the fresh produce is so bitter as to be unsaleable. Hence this salt is always pitted as soon as possible, and is not reckoned in most of the "surrs" marketable until it has been a year buried, during which period the Glauber and Magnesian salts, at any rate, disappear, deliquescing, owing to their superior solubility. The salt workers here, as at Sooltanpore and Bhurtpore, depend entirely on the advances of traders and usurers, and, working thus on borrowed capital, make but a poor livelihood. The salt varies a good deal in quality, none of it is good; but that of some of the saline tracts is so bad, as to be barely saleable when plenty of Balumbha and Sooltanporee are in the market. Taken all through, the cost of production of this salt certainly does not exceed from 2 to 3 annas a maund. Altogether, these works comprised during the year 58 wells and 902 vats, and turned out, owing to the unfavorable season (*vide para.* 30 *and note*) but little over a lakh of maunds. The average out-turn does not exceed 6,000 tons. A few further particulars are given towards the end of para. 74, Punjab Sectional Review.

Lines of import and means of transport.

As a rule, almost the whole of the Salumbha salt crosses our Line at the Sylanee, Pulwul and Hodul posts of the Delhi, and the Kosee post of the Muttra Division; carts, camels, bullocks, are all made use of in transporting it. The routes taken are various; some, crossing at Sylanee, makes its way by village roads to the main high way at Bullubgurh, and so, if necessary, reaches Delhi. But much of this salt is consumed in the neighbourhood of the Line. The major portion, perhaps, goes east to Hutteen, and thence either goes northwards to Pulwul, where it meets the main Bullubgurh and Delhi metalled road, or southward to Buncharee, where it joins the same road, and, following this for a few miles, crosses at Hodul. At times, a good deal of the trade goes south to near Nugeena, thence eastward to Poonahanna, beyond which it either goes direct to Hodul, or branches southward to Kosee. A very little comes down to Agra, but the greater part of the Agra Salumbha imports are merely nominal, being Muttra imports (*vide* paras. 64-65) paid for at the Agra Customs House. Of course Salumbha has no duty to pay to any Native states. Until the present year, the area of distribution of this salt was very limited; rarely was any appreciable amount of it exported beyond the limits of the Meerut, Agra and Delhi Revenue Divisions; a little, it is said, at times used to go down to Ulwar; but, considering the abundance and cheapness of Sambhur at this latter city, I rather doubt the fact. During the past year, the comparative shortness of supply and high prices of Sooltanporee and Balumbha, led to the export, by rail, of Salumbha in large quantities, some of which

Area of distribution and prices.

even reached Mirzapore. Prices even of this salt rose a little; they averaged about Rs. 3-8 a maund in Delhi, Rs. 3-13 in Muttra, and Rs. 4-3 in Agra. Notwithstanding the unusual demand, the stocks in hand, at the close of the official year, were large as compared with the average annual production. Some four lakhs of maunds were in store, which is equivalent to the produce of two and two-thirds years, and to the consumption of four years, at the former rate of sales, and two years at the rate of the past year's consumption. The fact that most of this salt requires to be pitted for a full year, to render it eatable, partly explains the largeness of the stock, but besides this, the inferiority of the article has for years been diminishing its consumption, and year by year, until now, more has been produced than sold. During the past year, the rise in price in the Bhurtpore and Sooltanpore salts, and the shortness of the supply of both these staples, especially the latter, gave Salumbha an unusually good opening, and as the holders, wisely anxious to get rid of as much as possible of their heavy stocks, stuck to their old prices, they sold some two lakhs of maunds, or double the quantity disposed of in the previous year; and far more than double that sent into the market in 1864-65 and 1865-66. This development of the trade of the Noh works, depending on temporary causes, gives, I think, no augury for the future, and as time goes on, and other better salts obtain additional facilities for carriage, I expect the consumption of Salumbha to decline, year by year, until confined to a small area in the immediate neighbourhood of the works.

Stocks in hand are not excessive.

Trade prospects.

84. In regard to the Bunwar salt, I regret to say that I possess no accurate information. The whole of this so-called Bunwar crosses in the Raipore Division of the Central Provinces' Section, and it is all nominally Madras salt, from the neighbourhood of Ganjam, which has paid a duty of Re. 1-8 a maund before leaving the Madras Presidency. As a matter of fact, it is probable that a large proportion of this is illicitly-made salt from the neighbourhood of the Chilka Lake, made both in Madras and Bengal territory. Of the manufacture, nothing certain is known. I trust, during the coming cold season, when inspecting the Central Provinces Line, to find time to go down the Mahanuddee to the Coast, see the Chilka Lake, visit Ganjam, the neighbouring works, and return to Raipore by the Cuttack Road. I shall thus post myself in the whole road and river salt trade, licit and illicit, of this part of the country, in regard to which, at present, the greatest uncertainty exists. Of the Bunjarah tracks from the Coast, no one can furnish me with reliable particulars; this much we know, that Bunjarahs do bring up the bulk of this salt, laden on their bullocks, as return freight for the grain, cotton, and lac, that they take down, and that the remainder comes up the Mahanuddy by boat to Sumbulpore, chiefly from the depôts of Binka and Naugor Kanteh. Transit dues (aggregating on the average about 5 annas a maund) are *said* to be levied by various Native states, through which, by one route or another, the salt finds its way; but no two of the Bunjarahs seem to agree as to the exact amounts paid, or the chieftains to whom the payments are made. Inside our Line, the whole Chutteesgurh country and the western and central portions of Chota Nagpore seem to me chiefly supplied with this salt, which also pervades the tributary mehals. At Raipore itself, the price of this salt appears to vary from Rs. 5-10 to Rs. 6-12 per maund. At Puddumpore, where much of the salt goes after crossing the Line at

Bunwar, Bunmalle Gora, or Madras coast salt.

Manufacture and cost.

Lines of import and means of carriage.

Duties levied by Native states en-route.

Area of distribution.

Decrease.

Sumbulpore, this salt sells at from Rs. 6-6 to Rs. 7-4. There has been a considerable decrease in the quantity of this salt imported across our Line, which amounted to only 1,82,000 maunds in 1867-68, against 2,11,000 maunds in the preceding 12 months. This is not due to any decrease in consumption, but to an increase in the quantity that has rounded our terminus at Samasingha, instead of crossing the Line (*vide* paras. 11 and 132, and Central Provinces' Sectional Review, paras. 28, 29 and 42.) Until the gap that now exists between our terminus and the sea be closed, no increase in the import of this salt seems probable. On the contrary, although there may be fluctuations, depending on the export trade of grain, &c., to which salt is the natural return freight, a steady decrease must be expected, as the Bunjarahs become more and more habituated to the circuitous track round our terminus. One only possible source of increase exists;—the Raipore traders declared to the Deputy Commissioner that, as soon as the Jubbulpore and Mundlah road *viâ* the Chilpee Ghât was completed, they intended to try sending Bunwar salt to Jubbulpore; but, considering that when the rail is once open, Kokan may be sold for Rs. 5 a maund at Jubbulpore, whereas Bunwar never appears to sell lower than Rs. 5-8 a maund at Raipore, it seems more likely that Kokan should come down than that Bunwar should go up the road.

Prospects of the trade.

Octroi duties still appear to be levied on salt in certain towns in the Punjab and Central Provinces.

85. So much for the more important descriptions of salt imported across the Line. Before leaving this branch of the subject altogether, I think it right to notice, that salt still appears to be subject to the payment of octroi duties, in some of the towns of the Punjab and Central Provinces. In the North-Western Provinces, this has, I believe, been held to be illegal, but whether it be so or not, I would strongly recommend what it appears to me the legislature manifestly intended, *viz.*, the exemption of salt from all tax, or duty, other than that levied in the several Customs Departments.

SUGAR.

86. Turning now to sugar, it will be remembered that I have already, in paras. 43 and 47, noticed the principal causes that, during the past year, have operated to stimulate the trade in this article. At the same time, I pointed out that, so far from our duties having injured (as was asserted) the export trade, they were in reality so little felt that, notwithstanding their having been summarily doubled in 1861, the trade had ever since steadily increased, yielding us, during the past year, no less than a sum than 16¼ lakhs,—the largest revenue ever yet realized from this source by the department. I also strongly advocated the necessity of closing the present duty-free channel for sugar by the Chenab and Indus, as a measure which, setting other considerations aside, we could scarcely consistently neglect. I shall not here re-open these questions, but shall briefly notice some other matters connected with the sugar trade.

Proportion of trade passing each division.

87. The Delhi Division is that through which the greatest proportion of the sugar trade passes; next in importance come Agra, Hansie, Muttra, Sirsa, Jhansie, in the order in which I have named them; then Saugor, which passes only ½ a lakh of maunds altogether; and then Hoshungabad, Nagpore and Raipore, where unrefined sugar is not taxed, and only a trifling quantity of the refined article is exported. The sub-noted table shows the

amount of sugar that passed, and the duty that was levied in each division during 1867-68 :—

Division.	Sugar.	Duty
	Mds.	Rs.
Delhi	9,05,900	5,61,711
Agra	5,28,031	3,77,112
Hansie	3,99,684	2,79,700
Muttra	2,57,137	1,65,548
Sirsa	1,57,034	81,668
Jhansie	1,37,613	91,996
Saugor	50,632	42,201
Hoshungabad	12,981	12,981
Nagpore	10,881	10,881
Raipore	454	454

As refined sugar pays a duty of Re. 1, and unrefined of only 6 annas, per maund, it happens that at Sirsa, where the trade in the latter article greatly preponderates, the revenue realized is smaller than at Jhansie, where, although a lesser quantity of sugar was passed, a larger proportion of it was refined.

Proportion of refined and unrefined sugar exported

88. The proportions of refined and unrefined sugar, paying duty on export during the past official year, and preceding corresponding 12 months, were as follows :—

Year.	Refined.	Unrefined.	Total.
	Mds.	Mds.	Mds.
1867-68	11,21,296	13,39,050	24,60,346
Corresponding 12 months of 1866-67 ...	9,11,930	13,49,008	22,60,938
Do. do. 1865-66 ...	9,70,339	14,33,848	24,04,187
Do. do. 1864-65 ...	8,82,208	13,07,579	21,89,787

Increased facilities for carriage, afforded by the development of our Railway system, having largely contributed to the increase in our exports, that increase, as was natural, has chiefly been in refined sugar, the article which, with reference to its weight and cost of conveyance, is best worth transport. As for unrefined sugar, it at present only pays duty, in the Central Provinces, at the upper beats in the Saugor Division. I have strongly urged in the Central Provinces' Sectional Review (*vide* Appendix III, para. 19) a re-consideration of this subject.

Necessity of taxing raw sugars in the Central Provinces as well as elsewhere.

89. When Sir R. Temple exempted raw sugars from taxation, it was as a probably legitimate encouragement to a branch of agriculture, locally in its infancy. There were no railroads then in the Central Provinces, and what little raw sugar *was* exported, south of the Saugor Division, was exclusively local

produce. All this has changed now; raw sugar from Mirzapore has already begun to come down in small quantities, *vid* Jubbulpore; and once the rail is opened from this latter place to Hoshungabad, it will, as far as can be judged from prices, and the opinions of the trade, be extensively and almost exclusively exported across the Hoshungabad and lower beats of the Saugor Division. Even at the present time, raw sugar from Bombay runs up to Khundwa, and thence crosses into Bhopal. Refined sugar, taking the same route, we now tax,* but the raw, of course, passes free. The result of Railway progress in two years promises to be, that 9-10ths of the raw sugar exported from the Central Provinces will be Mirzapore or Bombay staples; and it is impossible, if we retain the duty elsewhere, consistently to pass these sugars here, free of duty. The object of the exemption, *viz.*, that of fostering local production, will no longer be advanced, when it is Mirzapore sugar that chiefly benefits; while even if I *could*, in principle, advocate taxing Mirzapore sugar, and allowing the local produce to go free, in practice the extreme difficulty of discriminating between the raw saccharine produce of different localities, would conclusively bar any such rule. I earnestly trust that this matter may *at once* receive the attention it deserves. Every day that a decision is delayed, revenue, that we can ill spare, is being lost, and the same may be said, with equal force and truth, in regard to the Chenab and Indus duty-free route.

COMMUNICATIONS AND SUPPLY OF SALT.

NECESSITY OF INSURING A SUFFICIENT AND REGULAR SUPPLY AT REASONABLE PRICES.

90. Imposing the heavy duty that we do on salt, and thereby not only largely increasing the price of the article to the consumer, but also interfering, to a certain extent, to prevent the regular operation of the ordinary laws of supply and demand, we are bound, it seems to me, in the case of such a necessary as salt is, to provide that there shall, to a *certainty*, always be a regular and sufficient supply, at prices as little above our duty rates as possible. We force trade out of its natural into unnatural channels, and we are bound to see that these do not *fail*. During this past year, we had an example of what may some day, unless we take time by the forelock, happen on a larger scale. The Saugor Division depends for its imports on Bunjarah-carried Kansia and Sambhur salt. A variety of causes this year deterred the Bunjarahs from coming on as far as Saugor, in their usual numbers. Salt became scarce: there was plenty in Bhopal, but the carriers had hitherto always been Bunjarahs, and, especially in the wilder parts of the country, new forms of carriage do not spring up in a day. The consequence was, that even smuggled salt, that had been seized, was sold by auction in considerable quantities, at some of the posts, for Rs. 10-4 a maund; so that the retail purchaser, for a time, probably got little more than $3\frac{1}{2}$ seers for the rupee. This dearth was confined to narrow limits, and did not last long; there *were* abundant stocks outside the Line, at no great distance; and Kokan, rail-borne, was pushing up from the south, and so diminishing the area for distribution of the stocks inside the Line.

Accidental failure of a particular form of carriage, raised prices enormously, and temporarily caused a great scarcity of salt in rear of part of the Saugor Line.

Similar but more serious dearths might occur elsewhere.

Large stocks nowhere exist.

91. A similar dearth, and similar extravagant prices, might easily, from no very dissimilar causes, affect far wider areas and for longer periods. Nowhere, except perhaps at Bombay, do large stocks appear to be kept. Calcutta has sometimes little more than a single quarter's supply in hand: of our great up-country

* Vide Central Provinces' Sectional Review, para. 16.

staples, the stocks, at the works, at the close of the past official year, were only as follows:—

Bhurtpore	...	...	...	2,77,803
Sooltanpore	...	...	...	46,417
Sambhur Lake	...	...	...	7,82,000
Deedwana	...	...	...	38,000
Puchbuddra	...	...	...	25,000
Noh ...	...	...	...	3,94,158

It is clear that we are only living from hand to mouth: the sudden failure of any one great source of supply, would place our people in the most painful position, and then, not only (as a rule) would other sources be unable to supply the deficiency, but even if their stocks should, by chance, permit of this, it would take many months to enlarge, to any great extent, the available means of carriage along any given route. The mere delivery of the $6\frac{1}{4}$ lakhs of maunds of Sambhur, at marts close to our Line during the past year, continuously employed between 28,000 and 30,000 bullocks (pack, and in carts) and camels. It is probable that, under existing circumstances, the whole strength of our administration would be insufficient to get an *extra* $6\frac{1}{4}$ lakhs delivered, say within 6 months, at the Line, and if even this could be accomplished, the salt would cost a fabulous price.

Even if they did, in the absence of Railways, or water carriage, we shou find it impossible to provide, suddenly, mean of transport, for very much more than the usual imports from any given source.

92. Take Bengal. Here our monopoly system, after having entirely obliterated private manufacture, was at length suddenly abandoned, thereby forcing on the people the consumption of sea-imported salts. An European war, not long ago imminent, and possible at any moment, might not only raise the price of Liverpool and other imported salts, to an almost prohibitive level, but until the *jus gentium*, as regards letters of marque and the like, is put on a more satisfactory footing, might actually render our present large imports, or even any considerable proportion of them, impossible. What would Bengal then do, especially if, as is not impossible, complications simultaneously arose in Rajpootana? Her only resource would be in Kokan salt, which, with the Great Indian Peninsula open to Jubbulpore, might, *if* sufficient supplies existed, and no cyclone or unusual floods suspended manufacture, meet her wants, although only at *high prices.*

An European war might deprive Bengal of the supplies it now exclusively relies on.

93. Again, a sudden enhancement of their duties by Native chiefs (and I hardly see how we could consistently prevent this), or disturbances in Rajpootana, might, at any time, deprive Upper India of the major portion of her supplies. Here, also, we should have Kokan, and (if no war was going on) Calcutta sea imported salt, to fall back on, but at what prices? Only conceive the rise that would follow such a sudden growth of demand at any single source; to say nothing of the vast increase in agency charges, cost of carriage, &c.

Troubles in Rajpootana, or the sudden freak of an irresponsible potentate, might similarly cut off the supplies of the North Western Provinces.

94. The fact is, the matter is far too serious for us to content ourselves with leaving the issue to chance. If we maintain our present high* rates of duty (and they are, I contend, a perfectly legitimate source of revenue in this country), we must make sure of a sufficiency of cheap carriage from a sufficient number of great sources, to render a continuous and ample supply of salt, at reasonable rates, a matter wholly independent of the failure of one or two sources, however important. We must look to our *communications*, and we must do so now, when

THE MATTER TOO SERIOUS FOR US TO LEAVE THE ISSUE TO CHANCE.

Efficient communication with a sufficient number of great sources, indispensable.

*By high, I do not mean excessive, but merely *high* with reference to the rates of duty paid by all other articles, whether necessaries or luxuries. If the finances of the State urgently required two millions sterling more revenue, this extra two millions could, I believe, be easier raised, and with less suffering and annoyance to the people, and above all with less discontent on their part, by raising the duty to Rs. 4 than by any other fiscal measure yet devised. At the same time I should be the last to recommend such an increase, *except* in the face of severe financial pressure. From the first I have advocated lowering our duties to Rs. 2-8, and raising those of Madras and Bombay to this same level, by which the Empire would gain some 40 lakhs; but if our finances permitted it, I would gladly go further, and take even a lower rate for the uniform standard.

nothing presses, and not wait to be *driven* into it by some sudden necessity which, while it doubles the cost of all we undertake, leaves us no sufficient time to enable us to do it properly.

Of great sources the most important are those entirely under our own control.

95. Now, of great sources, to and from which, it is desirable to secure, as soon as possible, abundance of cheap carriage, (of such a nature that it shall be capable of great extension at little notice), those are the most important, which are situated within our own territories, and are thus entirely under our control, whose produce is liable to the imposition of no duty by foreign states, and whose whole profits go to enrich our own subjects, and *these* sources are naturally those to which our first efforts should be directed. First amongst these are

Pindadun Khan mines.

the Pindadun Khan mines. How long, or how often, the construction of a railroad from these mines to Lahore, has been discussed I know not; but short and comparatively easy as the line is, it is not, I fear, even *sanctioned* yet; and I would most earnestly, though respectfully, urge, that this is *one* of those salt conveyance lines that we are morally bound to set to work at, and complete, without further loss of time. If we were required to spend the whole of one year's salt revenue of Bengal, the Imperial Line, and the Punjab, in order to render a constant supply of reasonably cheap salt, a certainty to that population of 130 millions (*vide* para. 5 and note) which, during the past official year, paid us over four millions sterling (para. 28) as duty on the salt they consumed, we should be, I submit (be the general financial pressure almost what it might), *absolutely* bound to spend it. How much more, then, is it incumbent on us to give promptly the comparatively small sums required;—sums that will be reproductive, not only in the sense that I have pleaded for their expenditure, but even financially.

Sooltanpore.

96. But there is another British source of salt, more centrically situated. Capable as far as I could judge, after most careful local investigations, of great development (*vide* para. 78), a source at which a pure and already popular salt is produced, which, under all existing difficulties of transport, yielded us in 1866-67 over 30,000 tons, and may be depended on, I believe, to yield us 100,000 tons, as time goes on; and to this source Railway communication is, I would urge, indispensable. Distant only about 30 miles south of Delhi, the cluster of saline tracts, known as the Sooltanpore mehals, might, in eighteen months, be put in Railway communication with every part of the North-Western Provinces and the Punjab, for less than half the revenue that they have yielded to Government in a single year. I have myself seen the line. With the exception of one single ridge, of no magnitude, the country is of the easiest character. Keeping well east of the Nujjufgurh Jheel, no works, of any magnitude, need be constructed. A light rail (say 45lbs to the yard), light 16 ton engines, wagons not to exceed 3 tons and carry about 6,—the whole line, permanent way, earthwork, masonry, stations, plant, &c., including sidings into the more important works, could be unquestionably constructed for 12* lakhs of Rupees. The present average rate of carriage, *when* this is plentiful†, between the works and Delhi is $2\frac{1}{3}$ annas a ton a mile; with our easy gradients, even allowing for the dearness of fuel, our working expenses, on such a line, could not exceed 8 pie a ton per mile. Say we charged 1 anna 8 pie per ton per mile to begin with; this, on only 30,000 tons, on the 30 miles, would give us net (after deducting expenses) Rs. 56,250

* According to my estimate it is only ten and half lakhs; but I allow the margin for contingencies and agency charges, &c.

† When, as was the case during the past official year, carriage happens to be scarce, the rate rises to five annas a ton per mile.

on salt only, or nearly 4¾ per cent on our capital. I say nothing of all the sugar for Rajpootana, which goes by this *same* route in an *opposite* direction, to the extent of 34,000 tons a year, nor of passenger traffic, nor of the necessary increase of the salt imports. On salt alone, even as matters now stand, over 4 per cent. must be netted, and with no decent management, could the returns, on the whole, yield less than 6 per cent.; but we must have no architectural fantasies, no classic palaces, Norman fortresses, or Egyptian nondescripts: cheap, plain, but sound; rough to look at, but smooth enough in the working, for all practical purposes, like an American pioneer line. This is what we need, and such a line would yield a handsome return. Even, however, if it were *not* likely to do this, I would still urge that, if we mean to keep up that artificial state of trade, and markets, which a duty like ours involves, we are bound to undertake the work. This is not one of those undertakings that, like many public works, *may* be left to the ordinary laws of supply and demand,—left to the chance of some Company's thinking it a promising speculation. Suppose that to ensure a vast revenue, we had artificially so checked the natural supply of water in any country, as to leave in existence no wells, or tanks, but only a few rivers, and these, though noble ones, liable to sudden changes of course and failure, from causes wholly beyond our control, what civilized Government, under such circumstances, *could* hesitate to construct, not one alone, but several independent, thoroughly reliable canals, sufficient to *ensure*, at all times, an abundant and certain supply of life's prime necessary to their subjects? I submit that our position in regard to the salt supply of Upper India is not so widely different, as to deprive this suppositious case of all analogy, and I would urge, in the strongest manner, that this Line to Sooltanpore is just one of those canals that we ought to make at once, on our own account, without waiting for the chance of some Company's taking it up, 5 or 10 years hence, or stopping to connect it with some more extended project into which it may hereafter be possible to dovetail it.

Bengal coast works.

97. In Bengal, again, the Government stocks, the produce of the old monopoly days, are fast dwindling, and as yet no signs of private manufacture, to any appreciable extent, are observable. It seems to me of vital importance, that Bengal should again become the scene of extensive manufacture. Good salt, and in some places, as at Patree, &c., salt of the finest qualities, is made, throughout the Bombay Presidency, at a cost not exceeding 1½ annas a maund, as an average. In Bengal, it is hard if good salt cannot be made, once the manufacture is fairly started, for 6 annas a maund; now good sea salt, at 6 annas a maund, would contest the market, and, where the poorer classes are concerned, win the day, I believe, against Liverpool at Re. 1. But the manufacture is not in *existence*, and special encouragement is necessary to *create* it; no educated politician probably, in the present day, would advocate a permanent protective duty in any case; but protective duties, in the infancy of a trade or manufacture, are as legitimate as the exceptions in favor of minors, who, in the matter of responsibilities for debts, &c., are placed on a totally different footing to adults. For my own part, I would gladly see a reduction of duty, on a sliding scale, in favor of all salt turned out in Bengal coast works, opened in certain given favorable situations, for, say the first 5 years of their working. I contend that it would be a perfectly legitimate measure; but I am free to own, that in the face of the powerful opposition of the Cheshire salt-owners, I have no hopes of its adoption. My

suggestions, therefore, would take another direction. For the Cheshire salt* ships, we have deepened rivers, buoyed channels, built wharves, and erected light-houses. Can we not do a little for Bengal-made salt? Cannot Government select certain localities, where extensive works can be most profitably carried on, and easily supervised, and whence the produce can be easiest and cheapest conveyed to some of the principal marts connected with the Railway; and then build piers and jetties, and, where necessary, deepen and straighten channels, so as still further to facilitate the disposal of produce, by cheapening the cost of delivering it at the great commercial centres? Liverpool alone now supplies 5-8ths of the salt consumed by Bengal: any day that supply might fail us: no one who has watched the progress of the late American war, can doubt that in the present state of international law, a war with France or America, would reduce our salt imports by more than half and treble, or quadruple, the price of what did reach us safely. "It is well," as a great man said, "to hope for prosperity, but better to be prepared for misfortune," and how can we better prepare to meet this very possible (though let us hope not very probable) calamity, than by encouraging a healthy manufacture of this necessary, on our own admirably-adapted soil, in some thoroughly suitable locality? The details, of course, are for the local authorities, but let it not be thought, that in making these general suggestions, I am travelling beyond my own province. I am responsible for the supply of salt to the people in rear of the Line. A salt famine in Lower Bengal, would, under existing circumstances, entail on us, in less than three months, a similar, though less aggravated, dearth. Our fortunes, in this matter, are indissolubly bound up with theirs, and though our traders might, and doubtless would, reap a golden harvest, the masses of whom we must chiefly think (as they have no one else to think for them) would suffer, I fear, sadly; surely this matter is well worth consideration.

Rajpootana Railway.

98. There is yet one other most important Salt Line, and one which, in conjunction with the completed Great Indian Peninsula Line, the Pindadun Khan and Sooltanpore Lines, and the resuscitation of manufacture in Bengal, will entirely assure our salt supply. That a railroad should be constructed from the Sambhur Lake, *viâ* Bhurtpore to Agra, is, I hope, a settled matter; and if a branch from Sambhur could be arranged to come up *viâ* Rewaree, and join our Sooltanpore Line, it would doubtless enhance the value of that line. But there is one very moot point in regard to this Railway, which I wish to notice, and that is, whether the line should, from Sambhur, run down *viâ* Neemuch, to Baroda, or go *viâ* Pallee, Erinpoora and Deesa, to Ahmedabad. Now, it is not from an engineering point of view that I wish to present the matter, although, having been over the whole line, I entertain no doubt that the Deesa line can be made in about half the time and for at least a million less than the Neemuch one; nor is it from a strategical or political point of view (in both of which I believe the Deesa line has pre-eminently the advantage), that I have to consider it; nor is it even with regard to the general commercial prospects of the districts respectively tapped by the two lines, (in neither case peculiarly brilliant), but decidedly least so, on the Neemuch side, that I have to deal; it is solely with reference to our salt supply, that I wish to point out the great superiority of the Deesa over the Neemuch Line. The Neemuch Line, having passed Bhurtpore and Sambhur, meets no other salt source, and in no way promises to protect us against the contingency of the Bhurt-

Deesa Line preferable to the Neemuch one, in every respect but especially so, where the salt supply is concerned.

* I do not say these exclusively, but for these in common with other trading vessels.

pore manufacture falling off, under continued mismanagement, notwithstanding the stimulus of Railway conveyance, (and I confess I think this not impossible), or of the Jaipore state raising its duty at the lake, so as to absorb the whole of the advantage gained by Railway transport, which we hope to secure to the consumers, our subjects. Agreements might be entered into with the different states; but after considering the matter fully, and discussing the question in all its bearings with the officers best qualified to judge, I was unable, supposing the Neemuch line to be adopted, to see my way, without a considerable sacrifice on our part, to any really satisfactory arrangements. If, however, the Deesa line be chosen, we require no agreement, and our supplies by it will be liable to no fluctuations from changes of tariff in a Native state. Besides Sambhur and Bhurtpore, the Deesa line will tap two other important sources, Puchbuddra and the Runn of Cutch works, at both of which salt, finer, and, if possible, purer, though, as yet, less well known in Upper India than Sambhur, is produced. Including all costs, Puchbuddra salt will be laden in the Railway, at Erinpoora, for Rs. 0-12 a maund,* while the fine Patree salt will be laden, at a station between Ahmedabad and Deesa, for from 5 to 6 annas a maund. Allowing the present Great Indian Peninsula rates of $\frac{1}{3}$ of a pie a mile per maund (and we might doubtless, on a line like this, hope for the more liberal East Indian Railway "long" rate of $\frac{1}{4}$ of a pie a mile per maund) and including duty, these three salts will sell at Agra, exclusive of importers' profits, as follows:—

Patree	...	...	Rs. 4-6-0 per maund
Sambhur	...	...	„ 4-7-0 „
Puchbuddra	...	...	„ 4-8-0 „

Here, then, we possess the best of checks; Jodhpore, Bhurtpore and Jaipore each serve to control any increase in the duties levied by the others on their own States' produce; while even if the three combine to raise the price of their supplies, our own Patree, British-made salt, the manufacture of which, from what I saw of it, is susceptible of indefinite extension, will undersell them all, and still keep prices down within reasonable limits.

Rates at which the various kinds of salt may be expected, when these works are completed, to sell at the principal marts.

99. Supposing now, our Deesa-Rajpootana line, the Sooltanpore and Pindadun Khan branches, and the Great Indian Peninsula to Jubbulpore, complete (and I cannot myself doubt that they will be so before many years), it is interesting to trace out the positions that the various salts will occupy, and the marts that they are likely to command. In the following table, I have exhibited the wholesale selling price, less importer's profits, of eight of the leading sorts† of salt, that may be expected to obtain at twelve of the chief up-country marts, when these works are complete. I have calculated this table on the following basis:—

Liverpool, at Rs. 3-4 duty, the rest at	...			3 Rs. as now.	
Bhurtpore salt to leave the works on an average (everything included) of	...			8 annas per maund.	
Sooltanporee	...	...	...	6 „	„
Sambhur	...	...	...	15 „	„
Lahoree	...	...	...	4 „	„

and I have charged each of these salts further 1 anna a maund for lading.

* This is a maximum; it will usually average somewhat lower.

† I have made no mention of one of the richest salt sources in India, *viz.*, those vast natural deposits in Sindh, which yield what is usually known as the Seergunda Salt. I have been unable to obtain any sufficiently reliable information as to the cost of carriage and the amount of this and of labour available. This salt is not at present, although apparently of the purest quality, very extensively used. The salt has to be dug out, carried to boats, and brought down by river to Kurrachee. If it be true that *any amount* of this salt can be shipped at Kurrachee for from 2 annas to 3 annas a maund, it may hereafter become one of our leading staples. Mr. Dalziel says it can be laid down in Bombay at 2½ annas to 3 annas a maund; he ought to know best; but my own enquiries led me to believe that 5 annas would be nearer the mark, and that the supply both of labour in the neighbourhood of the works and of carriage from Seergunda to Kurrachee was so limited that any sudden extension of the trade would enormously increase the cost.

Kokan to be laded, as now, at Kullian, everything included, for 4 annas. Puchbuddra to leave the works at an average of 8 annas, but to be debited with 4 annas more for conveyance to and lading at Railway stations. Buragura, or Patree, to leave the works at 2 annas, but be debited with 4 annas more for conveyance to and lading on the rail.* Further, I have allowed in all cases 2 annas a maund for crossing the Hooghly at Calcutta, the Ganges at Cawnpore, and Benares; the Jumna, at Agra; and I have every where charged 1 anna a maund for unlading, as also for change of rail. On the short Sooltanpore branch, I have allowed the exceptional rate of $\frac{1}{2}$ pie per mile (and I should recommend at first starting 3-4ths), and elsewhere 1-3rd, except for distances over 300 on the East Indian Railway, where the lowest rate has been charged.

	Umritsur.	Umballa.	Meerut.	Delhi.	Agra.	Cawnpore.	Lucknow.	Allahabad.	Benares.	Patna.	Jumalpore.	Jubbulpore.
	Rs. A. P.	Rs. A. P.	Rs. A P	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Bhurtpore	4 10 11	4 6 11	4 3 3	4 1 10	3 11 11	4 0 4	4 3 6	4 3 8	4 7 6	4 10 2	4 12 11	4 10 0
Sooltanpore	4 4 1	4 1 0	3 12 5	3 9 3	3 15 2	4 2 7	4 5 9	4 5 11	4 9 9	4 12 5	4 15 2	4 12 3
Sambhir	5 6 0	5 2 0	4 14 4	4 12 11	4 7 0	4 11 5	4 14 7	4 14 9	5 2 7	5 5 3	5 8 0	5 5 1
Kokan	6 0 5	5 12 5	5 8 9	5 8 4	5 4 5	5 0 0	5 3 2	4 12 8	5 0 6	5 3 2	5 5 11	4 5 4
Puchbuddra	5 7 0	5 3 0	4 15 4	4 13 11	4 8 0	4 12 5	4 15 7	4 15 9	5 3 7	5 6 3	5 9 0	5 6 1
Lahore	3 9 8	3 13 8	4 1 4	4 2 9	4 6 7	4 11 3	4 14 5	4 14 7	5 2 5	5 5 1	5 7 10	5 4 11
Liverpool at Rs. 75 ...	7 11 8	7 7 8	7 4 0	7 2 7	6 14 9	6 10 4	6 13 6	6 7 0	6 3 2	6 0 6	5 13 9	6 13 4
Liverpool at Rs. 100 ...	7 15 8	7 11 8	7 8 0	7 6 7	7 2 9	6 14 4	7 1 6	6 11 0	6 7 2	6 4 6	6 1 9	7 1 4
Patree or Buragura ...	5 5 0	5 1 0	4 13 4	4 11 11	4 6 0	4 10 5	4 13 7	4 13 9	5 1 7	5 4 3	5 7 0	5 4 1

Now this table shows that, at UMRITSUR, no salt will have a chance against Lahoree. Sooltanpore, the next cheapest, will be

* The Deputy Commissioner of Customs, Northern Division, Bombay, puts the cost of carrying 2½ maunds of the Runn of Cutch salt by Bunjarah bullocks 50 miles at Re. 1. This would give over 6 annas a maund for conveying the salt to the nearest point of the proposed railway. Further, he debits the salt with cost of carriage from the works and *back again*, forgetting that the Bunjarahs return from Ahmedabad loaded with other produce, and thus he estimates the cost at 13 annas a maund. Now he may be right as to 6½ annas a maund being the cost of carriage from the Runn works to Ahmedabad; but at this latter place I was assured that 4 annas a maund might be assumed as a fair average, and considering that throughout Rajpootana up to within a hundred miles of Ahmedabad the cost of carriage, whether by carts, camels, or Bunjarah bullocks, averages, to my certain knowledge, 1 pie per maund per mile; this 4 annas' rate for 49 miles seemed reasonable.

10 annas 5 pie dearer a maund; and Bhurtpore, the next, no less than Rs. 1-1-3.

At UMBALLA, Lahoree will still be the cheapest, but here, it will only have the advantage of 2 annas and 5 pie over Sooltanporee, and 8 annas and 4 pie over Bhurtpore. At MEERUT, Sooltanporee is the cheapest, Lahoree being only 4 annas and 11 pie behind, and Bhurtpore 6 annas and 10 pie. At DELHI, Sooltanporee has no near rivals; Bhurtpore is 8 annas and 7 pie, Lahoree (which, great as the circuit is, will find it cheaper to come round by rail, than go straight by road) 9 annas and 6 pie. At AGRA, Bhurtpore stands first, but Sooltanporee is only 3 annas 3 pie dearer, while Patree, Sambhur and Puchbuddra are only respectively 10 annas 1 pie, 11 annas 1 pie, and 12 annas 1 pie dearer. Considering the difference of quality, Patree would here have a fair chance, as also would the old established favorite, Sambhur, although a trifle dearer. In CAWNPORE, Bhurtpore still heads the list, with Sooltanporee only 2 annas and 3 pie, and Sambhur, &c., as much as at Agra. At LUCKNOW and ALLAHABAD, these salts occupy the same relative positions, but at Allahabad, Kokan appears only 9 annas behind Bhurtpore, and 1 anna 1 pie, 2 annas 1 pie, and 3 annas 1 pie, cheaper than Patree, Sambhur, and Puchbuddra respectively. The superior cheapness, however, of Bhurtpore, and quality of the three latter salts, would probably bar the market to Kokan. It may be well to notice that, from Cawnpore downwards, Lahoree and Sambhur will sell for almost the same price. At BENARES, PATNA, and JUMALPORE, Bhurtpore is still first; Sooltanpore second; Kokan third, and Patree fourth, and all undersell (the first by no less than Rs. 1-0-10 a maund at Jumalpore) Liverpool, even when priced at Rs. 75 (per 100 maunds in bond) in Calcutta. At JUBBULPORE, Kokan has it all its own way, Bhurtpore coming next at 4 annas 8 pie, and Sooltanpore third, 6 annas 11 pie dearer. I have worked this question out much more elaborately, for nearly the whole tract defined in para. 4, and for various forms of conveyance; but the above will suffice to convey some idea of the future course of trade, and (if from 4 to 6 annas a maund be everywhere added for dealers' profits) of the future probable prices of the more important staples at all these commercial centres.

Roads and district communications.

100. I have dealt, above, with the main arteries of traffic only; and do not here propose to enter into any details in regard to minor channels. In the first place, although numerous district roads that I examined, in both the Punjab and North-Western Provinces, appeared to me scarcely to have received from the local officers attention commensurate with their commercial importance, I am of opinion that our object (which is improvement in the future) will be best attained by my yearly submitting to each Government, before the close of the rains, a list of those highways which, in the interests of the department, I consider most deserving of attention, leaving it to Government to issue, in regard to each Line, such specific instructions to the local officers as it may deem expedient. In the second place, the development of Railways is changing the face of the country, and altering altogether the course of trade and traffic. We shall entirely need to re-arrange our secondary lines in many places; though how this may best be done can scarcely be decided until the Railway lines are complete. It is on this account that I forbear to press the question of new roads, one or two of which appear to me of no ordinary importance, but which may, at the same time, I clearly see, very possibly prove to be by no means the best lines, when the Punjab, &c., Railways are once open throughout. We are everywhere in a transition state, and if we can only get the more important *existing* roads kept in

decent order, we shall be able to wait until, in the maturity of our Upper Indian Railway system, we see clearly what new roads will most assist the salt and sugar trades.

THE SUBSTITUTION FOR OUR PREVENTIVE LINE, OF OFFICERS FOR THE LEVY OF OUR DUTY AT THE PRINCIPAL SOURCES

IS IMPRACTICABLE

101. It had been with many, as with myself, a favorite dream that on the completion of our Railway system, some such arrangements might be made for taxing salt, intended for export into our territories, at the works themselves, as should enable us to dispense with our huge preventive Line. I regret to say, that an examination of the country has convinced me that this is impracticable. In the first place, if even Rajpootana only contained the few famous sources best known to us, no scheme that could be devised for levying the duty at them, would render the withdrawal of the Line safe. The Rajahs neither *could*, nor *would* (of this every one seems convinced in Rajpootana) allow us to impose our present heavy tax on *all* the salt removed from the works: no, not even if we agreed to credit them with a share of the revenue so raised, proportioned to the full probable consumption of all their own subjects. To force their people, who have hitherto always procured salt at from 4 annas to 1 rupee a maund, as a maximum, suddenly to pay from Rs. 3-4 to Rs. 4 a maund for the same salt, is more than most Rajpootana Chiefs dare do, unless we are prepared to back them with British bayonets, which, in such a matter, I deem wholly out of the question. On the other hand, those that *could* do it, *would* not do it. It might not be one-fiftieth part as objectionable a mode of raising revenue as some which are resorted to; but it is repugnant to their own ideas, and to the general sense of their subject communities, and they would not, I believe, entertain the idea. *Our* subjects have, in the course of time, grown accustomed to our gradually enhanced duty, which, after all, constitutes, on an average, only half of the price they pay for their salt: whereas, with the subjects of these Native princes, the rise would be sudden, and with them the duty would, as an average, constitute 6-7ths of the price. All, therefore, that we could reasonably hope for, would be facilities for taxing at the sources, salt intended for export into our territories, or possibly of other distant Native states. But, in practice, no real check could be maintained; even if we subsidized the chiefs to aid us with all their establishments, it would be impossible, once our sole safeguard, the preventive cordon, was withdrawn, to prevent persons taking away salt, avowedly only for their own towns in Jaipore or Bhurtpore territory, and subsequently surreptitiously introducing half, or all their stocks, into our territory.

even if Rajpootana only contained the few famous salt sources:

insuperable practical difficulties would arise.

The argument that all Railway-borne salt could be taxed, and that traders who refused to avail themselves of rail carriage would lose as much by this as they would gain by evading our duty, is untenable.

102. It has, however, been suggested that parties doing this would lose the advantage of Railway conveyance, and that this loss would counterbalance the gain of escaping the payment of duty. In the first place, this is not the case: traders might lade at the Sambhur Lake, for Native marts, within 30 or 40 miles of some of *our* greatest up-country commercial centres, and so, while evading the duty, still obtain, for the greatest portion of the way, the advantage of transport by rail. But grant that we *could* contrive some plan to defeat this kind of fraud, after all, what does the advantage of rail amount to the trader? To us and to the people it is invaluable, because it renders imports in all seasons possible, and because it enables us, if need be, to multiply the usual amount of our imports by ten, in a single fortnight; but to the trader it is merely a saving of two-thirds of a pie a mile per maund. When carriage is fairly cheap and plentiful, salt is brought in by carts, camels and bullocks indifferently, from the Sambhur Lake, at from 14 annas to 1 rupee per maund. It is carried, therefore, 184 miles for from 168 to 192 pie; say 1 pie per mile. Now, the G. I. P. salt rate (as well as

the E. I. R. rate for distances less than 300 miles) is one-third of a pie a mile per maund. The gain, therefore, is only two-thirds of a pie per mile. It takes a distance of 814 miles, to make the difference in cost of carriage come up to our duty of Rs. 3, and the trader, who surreptitiously exported to Agra his Sambhur salt by camels, instead of by rail, would lose scarcely 11 annas, while he would evade payment (once the Line ceased to exist) of a duty of Rs. 3.

As a fact, Rajpootana includes innumerable salt sources, the produce of which can only be kept out of British territory, or compelled to pay duty on entering the same, by maintaining the Imperial Line.

103. Even then did Rajpootana comprise only a few great and well known saline tracts, it would be, in practice, impossible to abandon our Line; but, as a matter of fact, not only salt lands, but salt works, seem thickly scattered over the whole surface of the country. None of these produce as much or as good salt, as either Sambhur, Deedwana, or Puchbuddra: and, therefore, so long as all are on an equality, the manufacture at none of them assumes any great magnitude. They supply their own immediate neighbourhoods, and that is, usually, the most they do; and yet there is not one single one of some 30 tracts with which I am acquainted (and it is impossible to say how many more there may be), from which, had we no officers posted there to watch the manufacture, salt, sufficient to injure our revenue seriously, could not be made, and introduced at once into British territory if only the Line were withdrawn. The following are some of the existing salt works in Rajpootana with which I am acquainted. *Jeesalmere:* manufacture, on a considerable scale, said to amount to 3 lakhs of maunds, salt fairly pure, but slightly pinkish. *Chapoor,* near Chooroo, Bikaneer: about 25,000* maunds yearly, a poor but not very impure earth salt (several other villages in Bikaneer, such as Rutnagar, notes of whose names are lost, make impure but edible earth salt, in quantities from a few hundred to several thousand maunds). *Pokurun:* about 30,000 maunds, a very pink, and rather bitter, but still, in the neighbourhood, well-liked salt. *Phullowdee:* manufacture, under the authority of the Raj, said to amount to 2 lakhs, a fair wholesome salt. *Rewasa:* about 1 to 1¼ lakhs of maunds, a salt of no merit, but locally much used. *Raichore:* a salt marsh and jheel, about 30 miles north of Sambhur. I have not seen this, but Captain Beynon, who visited it, seemed to think its produce fair (though, of course, far inferior to that of Sambhur), and its capacity of production great. North of this, again, he found another salt marsh. At *Nasnoda,* near Mohkumpoora; near *Palee;* at *Humawus, Sanwulto, Dhara Shanee, Kherwo, Guro, Puchyak, Lalkee, Sanodh, Rupabas, Burialo, and Sanwura,* there are salt works, the latter 11 of which are recognized by the Jodhpoor Raj, and allowed to manufacture salt, and consume it; but the workers are supposed to pay a duty of about 1 anna per maund (*viz.,* 2½ annas per bullock load), and they are prohibited from selling salt during eight months of the year, sale being only licensed from about the middle of March (*Cheyt, Buddee, Ekum*) to about the middle of July (*Assarh, Soodee, Poonon*). Various "*Karwars,*" the caste to which the said salt workers here invariably belong, assured me, that the joint produce of these 11 works ("*Dureebas,*" as salt sources are generically termed in Jodhpore), amounted to several lakhs of maunds; but although an establishment is maintained to supervise them, the State revenue does not exceed, I understand, Rs. 3,000 per annum, representing only sales to the

* These amounts should be considered to represent what the works do actually turn out in favourable years, because, in some seasons, when there is no demand, very little is made at some of them. Many of them, be it noted, are capable of turning out ten times their present practical maximum.

extent of half a lakh of maunds. Nothing could be more manifest than that, especially in Jodhpore, a Native government is altogether unable to prevent the most wholesale fraud, even where its own pecuniary interests are concerned. It is needless to say that our withdrawal of the Line, on the strength of any engagement on the part of the Native chiefs to watch such sources (and I have enumerated only those few that I came to know of, in a hurried tour through a portion only of Rajpootana), would be out of the question. They cannot watch them for themselves, when the temptation to evade their rules is a minimum, and where they themselves suffer in pocket from any failure of supervision. What might we expect, when, while the workers have before them prospects of realizing enormous profits, and every possible inducement to fraud, the Raj officials know that it is only an alien government that will lose by their neglect or connivance? As for our having an Internal Department spread throughout Rajpootana, similar to that now working in the North-Western Provinces and Oudh, if even the Rajas would agree to it (and this none of those best qualified to form an opinion believe), and if, moreover, it were possible for our officers to work throughout the interior of foreign states, without giving rise to an infinity of complications; even under such improbable circumstances, the expense of such an establishment would fall little short of that of the existing Line, while by no possible exertions could our main object of taxing all salt imported into British territory, be so thoroughly and certainly attained, as it is under present arrangements.

The Line cannot be dispensed with where Rajpootana is concerned, but in the event of the general equalization of duties throughout British India, a portion of the Line might be abolished.

104. The Line, so far as Rajpootana is concerned, must, I conceive, be maintained as long as we continue to levy a duty on the import of salt; but in the event of Government deciding to equalize (as I have already on other occasions so strongly advocated) the duty on salt throughout British India, a considerable reduction in the length of the Line seems possible. That we should maintain some 650 miles of Line merely to catch a differential rate of duty on salt, supposed to have already paid a certain duty to other British officers, does seem such a waste of power that its continuance seems impossible. Once the duty in Madras and Bombay was equalized with our own, we might *theoretically* abandon the whole Line from the Taptee near Boorhanpore, to Sumbulpore, or rather to the sea, to which, unless we do equalize the duty, we must at once prolong the Line. But in practice, *before* we can abandon this Line, *and this cannot be too strongly* urged, the Government of India must insist on a more efficient preventive system on the Coast than at present exists, at any rate, in the neighbourhood of Bombay. Once the duties were equalized, and an efficient preventive system on the Coast secured, a portion of the force, now employed on the Line between Boorhanpore on the Taptee and Sama Singha, would be utilized in continuing the remaining portion of our Line round the southern extremity of Rajpootana, as far as the estuary of the Loonee. This would complete our cordon round Rajpootana, and would be necessary to prevent Bunjarah-borne Rajpootana salt (always procurable in large quantities at Bhopal for about Rs. 3-8 a maund, and at Indore at a little higher price), rounding the Line at Boorhanpore, and so getting duty free into the Central Provinces, where the evasion of the duty would enable it to under-sell Kokan and monopolize the market. This cordon, too, would incidentally possess another advantage. If, at any future time, any combination to raise the price of Rajpootana salts should occur, we should always be in a position to adjust the balance, and compel a reasonable settlement, by taxing

all spices and other luxuries imported into these Native States, which are entirely dependent for such things on foreign countries.

CONSUMPTION OF SALT.

105. I have already, during the course of the past year, put on record, in two* papers that have been submitted to Government, a number of facts bearing upon the important question of the amount of salt required for human consumption, and I need not here reproduce what I there recorded. One matter, however, connected with these facts deserves prominent notice. It will, perhaps, be remembered, that I have always contended, that an allowance of 5 lbs. per head of the whole population, old and young, could not be considered insufficient to maintain our people in *health*, because this amount has been found to be a fully sufficient allowance for the tens of thousands of able-bodied adult convicts confined in the Jails in Upper India since the mutiny. This argument is, I consider, *absolutely conclusive as regards the health question*. The Chief Commissioner, Oudh, in noticing this argument, remarked, "Mr. Hume (arguing almost entirely from the experience obtained in the Jails of the North-Western Provinces), declares 2½ seers or 5lbs. to be sufficient. This scale was fixed many years ago. Although the fact has not been noticed by the Customs Authorities, the Chief Commissioner knows that this allowance has constantly been the subject of complaint. *In Oudh,† on the representation of the Inspector General of Prisons, it was not long ago increased.*" I was surprised at these remarks, for when mine, to which they refer, were penned, my office contained letters from officers in charge of jails, in both the Central Provinces and Oudh, showing the allowance under each of these administrations to be the same as in the North-Western Provinces, with the exception of a small extra issue in the *Central Provinces*, twice a week, when vegetables were given. Wishing to ascertain the present allowance for convicts in Oudh, I caused a reference to be made on the subject, and now have before me an official letter of Dr. Sutherland's, the Sanitary Commissioner, Oudh, dated June 1868, *certifying the prison allowance of salt, throughout the 12 jails of Oudh, to be exactly what I originally stated it, viz.*, "100 grains daily to each prisoner sick and healthy," or at 7,000 grains to the lb., 5·2 lbs. Now the 6,516·22 prisoners confined on the average, throughout the past year, in the Oudh Jails, were particularly healthy, exhibiting an average sick list of 163·31, or only about 2½ per cent. Under these circumstances, Mr. Strachey will doubtless concede, that I was *not* arguing almost entirely from the experience obtained in the Jails of the North-Western Provinces, and that an allowance of 5lbs. per head is not insufficient to maintain adult convicts in good health. I do not notice this merely because a mistake has been committed (the most careful cannot at times avoid such), but because the fact involved is too important to permit me to risk the possibility of any one's being hereafter misled by that mistake.

Consumption of convicts in the Oudh Jails;

supposed by Mr. Strachey to be greater:

is really only the same as that of convicts in the N. W. Provinces' Jails.

106. I have already, in para. 21, and its notes, shown that the adult consumption of the population in-side our Line, amounted, during 1867-68, to 8½ lbs. per head (infants and adults), at the *very lowest* estimate, and I have also shown, that the consumption of the population out-side our Line, during the same period, probably reached 12½lbs. Further, after considering various influences which operate to diminish consumption amongst the former, and increase it amongst the latter, I have given reasons for thinking it not impossible that one-half of the difference is

Actual consumption of India, in-side and out-side the Imperial Line.

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* (1.) Remarks of the 4th September 1867, on Mr. E. C. Braddon's note on the salt question.
(2.) Note on the Madras salt question, February 2.
† The italics are mine.

due to the difference in our rate of duty. I am aware that many will consider that I have, in the face of other, and, perhaps, more powerful causes, attributed too great an influence to the mere difference in duty; but in questions of such vital importance, it is best to be on the safe side. Accepting my conclusions, which are stated in the most favorable manner for the opponents of high duties,* it follows that, if we equalize duties by doubling those now levied at Madras and Bombay, we shall increase their revenue by at least 82·6 per cent., while, if the equalization be effected by halving ours, we shall diminish our own revenue by at least 76·5 per cent.

Actual consumption deduced from local enquiries:

107. During the past cold season, several of our officers have, in Oudh and elsewhere, been enquiring into the actual consumption of salt by individuals, and families, of all classes of the population. Mr. Hay, the Assistant Commissioner, a particularly energetic and intelligent officer, in the course of very numerous enquiries (reported, as they progressed, in his weekly diaries), has shown, to my satisfaction, that no scarcity of salt exists in Oudh at the present time, whatever it may possibly have done in past years; that all classes (even the poorest) obtain, without difficulty, as much salt as they desire, and that the average consumption per head does not, apparently, of choice, exceed 4½ seers. It is also shown by the Deputy Commissioner (*vide* Appendix VI, 21,) that there are independently ample reasons for believing that salt, to the extent of fully 9 lakhs of maunds (which would give a consumption little short of this standard), were actually consumed in Oudh during the past year. No enquiry of my own (and I have made many), or of any other single officer, has deduced any higher rate. Four seers a head was, I believe, the rate of consumption not long since deduced, from altogether independent considerations, by the Bengal Board of Revenue. On the whole, then, I am disposed to believe that, except where the price is a matter of no consequence, either on account of its extreme cheapness, or the wealth of the consumers, the personal consumption per head of the people will not exceed from 8 to 9 lbs. of salt; this amount being not only amply sufficient for health, but also fully to satisfy every healthy craving for this condiment. A personal experiment, purposely so conducted as to eliminate all sources of error, proved that I myself do not consume ½lb a month.

except under peculiar circumstances will not exceed from 8 to 9lbs. annually per head.

Consumption by cattle.

108. So many, and minute, enquiries into this matter of personal consumption, have now been made, that I hardly see how the conclusion, above noted, can reasonably be disputed. But it may be contended, and has, I know, been asserted, that while admitting adequate supplies for human food, we are injuring the cattle by stinting their supplies. Nay, it was, at one time, believed by some, that a murrain in Oudh was due to this very cause, which, however, had never yet produced similar results in the districts of the Punjab and North-Western Provinces, similarly situated, so far as the duty-paying supply of salt was concerned, and less well off in the matter of saline tracts, whence cattle, at any rate, always can, and occasionally *do*, satisfy any craving they may have for salt.

Appearance of cattle where salt is plentiful, and the reverse.

109. Travelling along the Line, with free salt on one side, and duty-paid salt on the other, and visiting most of the prin-

* It must not be supposed that I myself am an advocate for High Duties. As I have repeatedly stated on previous occasions, I should be glad to see the whole duty on salt taken off if the Government could afford to do this, *without* imposing any other more unpalatable tax on the people. What I protest against, are the exaggerated statements put forth from time to time, in regard to the alleged severe pressure on the poorer classes of our subjects of the present high rates. Facts and figures, statistics and local enquiries throughout Oude and the North-Western Provinces sufficiently demonstrate, that no such pressure exists. It would, of course, be an excellent thing, *if the state can afford it*, to cheapen salt in both ways, *viz.*, by increasing the facilities for its transport, (as I have recommended), and by reducing the duty; but what I contend is, that, even at present, salt is not anywhere so dear even to the poorest classes as to render any reduction (however desirable *per se*) an imperative necessity.

cipal inland salt sources of Upper India, I have had peculiar opportunities of observing the appearance of cattle in parts of the country, where its cost would render any liberal and regular supply of salt highly improbable, and where, again, its excessive cheapness would permit of almost any amount of it being supplied. Along the Line, at distances of 10, 15, and 20 miles above and below our cordon, the only difference observable was, that as a rule, the cattle, in British territory, looked healthier and better than in Native states. In our own territory, in the same locality, no difference whatsoever could be detected, nor did one single Native, of all the hundreds I questioned on the subject, suggest, or even when I suggested it to him, admit, that there was the least difference in the cattle above and below Line, in consequence of the difference in the price of salt; although where, owing to differences in the physical aspect of the two tracts, herbage and water were more plentiful in one than in the other, the difference in the appearance of the cattle, sometimes in favor of the dear, and sometimes in favor of the cheap, salt country was marked. To the best of my belief, the price of salt had not, in the country on either side of the whole Line, from the Sutledge to Agra (a distance of some 450 miles), in the minutest degree affected the condition of the cattle. As for Bhurtpore, and the neighbourhoods of the Sambhur Lake, Puchbuddra and Deedwana, the cattle (I do not say in consequence of, but notwithstanding the unlimited supply of salt available), in these localities, are ten times more miserable-looking than in any portion of the Doab that I have ever been in.

does not appear to differ.

110. The fact seems to be, that the people in Upper India have never been, at any time, in the habit of giving salt regularly to their herds. Mr. Kemp's and other officers' enquiries in Oudh go to show that, in the old Nawabee days, when home-made salt, good enough, at any rate, for cattle, was as plentiful as could be desired, only a small percentage of the kine ever received salt: 2 or 3 per cent., Mr. Kemp says, being cart and pack cattle, received from 1½ to 3 seers each, a year. Some 6 to 8 per cent. milch kine, obtained 2 or 3 chittacks, in one or two doses, just previous to calving; 3 or 4 per cent. of the cattle, sick, or over-worked, got a few chittacks as medicine. And some 3 per cent. of the cattle, belonging to salt-makers, and worked during part of the year almost night and day, got, as long as this work lasted, a chittack or so a week. The bulk of the cattle never received any salt. In some parts of Oudh (as they do to this day in Baraitch*) the cattle, from time to time, spontaneously frequented patches of saline earth, and licked the ground there freely; while in others, where apparently they had precisely similar opportunities, they never availed themselves of them. It is premature to express an opinion, but my impression is (the result of a good many observations) that where fodder is moderately good and *dry*, cattle, who have not been accustomed to its use, care little for salt, but that where the herbage is very rich, and rank, and juicy, they often have a craving for it. In Baraitch, where Mr. Adam made many enquiries, it appeared that only the working cattle (a *very* small percentage) have ever been in the habit of getting any salt, while the great mass of the cattle, vast herds that graze in the Oudh forests, never appear at any time to have received salt. It would not seem that the imposition of our duty has diminished

The fact appears to be that even at times, and in places, where salt has been, and is, cheapest, salt never was, and even now never is, given to the great mass of the cattle:

exemplified in Oudh in past and present times.

* Observed this year by Mr. Adam.

by 5,000 maunds a year, even, the consumption of salt by cattle, in the whole of Oudh. Those that got it there formerly, seem to get it now; in some localities, in the *same* quantities as before, in some, in *slightly* diminished quantities.

In Bhurtpore.

111. In Bhurtpore, in company with the Tehsildar of salt, I made careful enquiries in all the "*surrs*" or saline tracts I visited. Salt here positively costs nothing to the villagers, it being the rule that, whenever an order for weighment comes to any of the works, and a pit is opened, any resident of the place may claim a double handful gratis. Besides this, refuse salt lies everywhere about, in little heaps; no man, who wanted salt for his cattle, would have the smallest trouble in obtaining any reasonable quantity of salt, good enough for the purpose, free of any charge. Yet even here, the people unanimously declared, that they never gave their herds any salt, unless, perhaps, one fell sick from over-eating the abundant herbage early in the rains, and then only one or two doses, of a chittack or so, by way of medicine. Even of the bullocks employed for ploughing and draught, the majority of those, whose masters resided in the country, never received salt, but, on the other hand, the cartmen living in, and about, the towns, where salt is not quite so cheap, do usually give a chittack of salt, in some cases once a month, in others once or twice during the rains, and in a few at the Hoolee and Dewalee only. As for the buffaloes (even those giving milk largely), I could not hear of their ever receiving any salt. The Bunjarahs do unquestionably, as a rule, give their pack bullocks, when in hard work, from 1 to 1½ chittacks of salt a week, and they say that this is necessary to enable them, when moving and working hard, daily to digest the scanty fodder, which is all they are able to pick up. As regards bullocks resting where pasturage is good and sufficient, they do not, the Bunjarahs say, require it. On the whole, it admits of no doubt, I believe, that the people in Bhurtpore, where salt is *gratis*, positively, if anything, give *less* salt to their cattle, than is given in Oudh, where salt is worth Rs. 6 or 7 a maund. It *may* be that the people do not give their cattle salt enough; but if so, it is from choice; our Customs laws are not to be blamed; the practice, good and bad, obtains alike where those laws exist, and where they do not; I myself am by no means certain, that it is necessary to give more salt than the Natives habitually do. In Europe, where the climate is colder, and where the chief object of cattle proprietors is to render their beasts as unwieldy masses of fat as possible, salt is a necessity. The appetite has to be unnaturally stimulated, the animals have to be induced to over-eat themselves. But here nothing of the kind is desired: we do not wish to stimulate the appetite, as a general rule. It is only when cattle are sick, or specially over-worked, or receiving fodder, more or less repugnant to them, that we need, here, to give salt, and in these cases, it is everywhere given to this day, whether salt is dear or cheap. It is worthy of notice, that our herds of cattle graze in the forest, the dhak jungles, and our open plains, side by side with the nilghai and the antelope. They live the same lives; are almost as wild; feed on the same fodder; have the same opportunities, little or great (according to the locality) of licking salt earths. No one ever gives the nilghai any salt, and they are always in first-rate condition, and I confess, I fail at present to realize the necessity of giving any to the exactly similarly situated herd cattle. These, however, are questions in regard to which we shall continue our enquiries; but even *now*, there are ample grounds for believing that, as in the case of

Quite as much salt is given in Oudh, where salt is dear, as in Bhurtpore, where it costs nothing.

the people, so in that of their cattle, not the slightest difficulty is experienced in procuring as much salt as is desired.

PENAL ACTION OF THE DEPARTMENT.

112. Turning now to matters more immediately connected with the working of the department, I have first to examine, what may be termed, its penal action, during the past official year: although differing widely from those who hold, that in the case of our Customs' laws, "the just sympathies of those who have to administer them" must necessarily "be upon the side of those that break them," I still at once concede, that any excise system so alien to the natural spirit of the country, in which it operates, that, after fair trial and a reasonable number of years of judicious administration, it yet continues to involve any large proportion of the people in penalties and punishments, must (let its theoretical excellencies be what they may), be for that country, bad; and *ought*, at all costs, to be abandoned. It is on this account that I have watched, most jealously and anxiously, the penal results, to the public generally, of our existing system, and I am glad to find that there are valid reasons for believing, that probably no such system in the whole world ever entailed penalties on so infinitessimal a proportion of the population as does this one of ours.

FUNDAMENTAL MAXIMS OF THE DEPARTMENT.

113. The fundamental maxims that I consider should guide the department, are :—

1*st*.—To realize the largest possible revenue for the State, with the least possible suffering and inconvenience to individuals.

2*nd*.—To confine criminal prosecutions *rigidly* to the cases of persons who have, *beyond doubt*, *knowingly* and *wilfully* violated the laws.

Their application to the Internal Branch

As regards the first, whenever the total loss, likely to accrue to the State from relaxing any prohibition of the law, is clearly incommensurate with the annoyance, or suffering, entailed upon the people by its rigid enforcement, such relaxation ought, I hold, to be at once conceded. Acting on this principle, almost immediately after assuming charge of the Department, I solicited, and obtained, the sanction of Government, to restrict criminal proceedings, on account of illicit manufacture, to cases in which salt, to the amount of 2lbs. and upwards, was seized. By this alteration of practice, whereby we practically ensure prosecuting only those who have illicitly made salt to *sell*, the Government may have lost a few thousand rupees, but, per contra, instead of 4,277 persons having been committed for trial, as in 1866-67, under the old rules, only 1,800 have been prosecuted in 1867-68. In other words, by this moderate relaxation, 2,477 persons have been saved from a criminal prosecution, and the number of the persons against whom the arm of the law has had to be invoked, has been reduced by 4-7ths. On the Line, where a larger discretionary power has always been vested in the executive, and no special orders from higher authorities were necessary, the same principle has been enforced; and although, owing to an increase of smuggling from causes noticed in the Sectional Reviews, 3,147 persons were detected in breaches of the Customs' laws, in 1867-68, against 2,983 in the previous year, only 1,127 were committed for trial, against 1,169 in the previous year.

to the Line

RESUMÉ OF PROCEEDINGS IN THE CRIMINAL COURTS.

114. The following table exhibits our proceedings in the Criminal Courts, in all branches of the department, during the past two years :—

Convictions and acquittals.

Branch.	Section.	Number of persons detected in breaches of the Customs Laws.*		Number of persons released by Department.		Number of persons committed for trial.		Number of persons acquitted by the Courts.		Number of persons convicted by the Courts.		† Percentage of convictions on committals.	
		1866-67.	1867-68.	1866-67.	1867-68.	1866-67.	1867-68.	1866-67.	1867-68.	1866-67.	1867-68.	1866-67.	1867-68.
Line.	Punjab	122	116	6	28	116	88	23	10	93	78	80	89
	N. W. Provinces	1,119	1,286	886	1,020	233	266	17	26	216	‡235	93	90§
	Central Provinces	1,742	1,745	922	972	820	773	30	31	790	742	96	96
	Total of Line	2,983	3,147	1,814	2,020	1,169	1,127	70	67	1,099	1,055	94	94§
Internal.	N. W. Provinces	2,701	1,547	371	343	2,330	1,204	583	390	1,747	‖789	75	67§
	Oudh	2,237	1,035	290	439	1,947	596	364	63	1,583	¶496	81	89§
	Total Internal... ...	4,938	2,572	661	772	4,277	1,800	947	453	3,330	1,285	78	73§
	Grand Total of Department...	7,921	5,719	2,475	2,792	5,446	2,927	1,017	520	4,429	2,340	81	82§

Percentage of convictions on committals.

115. It will be observed, that of all our committals, tried during the year, convictions were obtained in 82 per cent. This result will compare, not unfavorably, with those obtained by the Judicial Officers of Upper India, in their committals to the higher Judicial tribunals (Magistrates and Deputy Commissioners to Sessions Judges and Commissioners), so far as these can be ascertained.

Percentages of convictions before Sessions Judges and Commissioners in Upper India, on committals by Subordinate Judicial Officers.

Province.	Year.		
	1866.	1865.	1864.
N. W. Provinces	74	73	79
Punjab	78	78	77
Central Provinces...	66	68	80
Oudh	60	65	...

When it is borne in mind, that the officers of our department, who commit these cases, have had no sort of legal training, and that the Courts are decidedly not unduly prejudiced in our

* In the Internal Department, persons found with less than one seer illicit salt have *not* been included.
† Percentage given in nearest whole numbers.
‡ Orders not received in 5 cases.
§ Percentages have, of course, been calculated on only committals tried. Undecided cases have been excluded from the calculations.
‖ Orders not received in 25 cases.
¶ Orders not received in 37 cases.

favor, I think that, our percentage of 82 must be held to prove considerable care and discretion on the part of the subordinate officials, as a body.

Higher on the Line than in the Internal Department.

116. The percentage on the Line is 94, in the Internal Department only 73. This difference is easy to explain. The Line smuggler is often an opium-eating, bhung-smoking, dissolute fellow, and he is generally, in his own circle, considered more or less of a bad character. His zemindar has, in most parts of the country, no sympathy with him; the villagers have no inclination to bear false witness in his behalf; the case is, moreover, promptly tried, and the facts to be proved are few and simple. In the Internal prosecutions, the reverse is the case. No illicit manufacture can well take place without the knowledge of the zemindar; covertly, he, generally, in seizure cases of this nature, exerts his influence against the department; under certain circumstances, he himself is sometimes liable to punishment. The villagers have, many of them, had a few pounds of salt, now and again, at a nominal price: their evidence can generally be relied on by the accused. Then some time must take place before the case is tried; samples have to be examined by the analyst, &c.; ample time is, therefore, given to concoct a consistent defence, and hunt up witnesses to substantiate it. Lastly, the facts involved in these cases are often somewhat complicated, and differences of opinion, as to the merits of the case, are more likely to occur than in Line committals.

Incidence of prosecutions on population:

117. Altogether, 2,927 persons were prosecuted during the past year. Any one, out of a population of over 45,000,000, might have been the subject of prosecution. The incidence, therefore, of our proceedings was about 1 to 15,000, or rather more than ·006 per cent. Laws that only one in fifteen thousand of the population are led into violating, may well be maintained, when for the benefit, as these are, of the remaining 14,999. During the past year, these laws enabled us to levy duties amounting nearly* to one and quarter millions sterling, so that for *each* prosecution, as it were, Rs. 4,155 were realized for the State. This, of course, only takes account of our departmental revenue, but there can be no doubt that the check maintained by us, and enforced by these prosecutions, directly contributed to the realization of the Punjab mine collections and the vast salt revenue of Bengal. These facts and figures sufficiently relieve the department, I think, of any charge of undue pressure on the people, through the instrumentality of the Courts: but for all that, I even now consider them too high, the excess being, in some measure, due, as I shall later notice, to the leniency exhibited in the sentences of many of the Judicial tribunals.

on revenue realized.

Releases by the department.

Line.

118. It will doubtless have been noticed, that nearly as many persons were released by the department as were committed, and the idea may suggest itself that a vast number of persons were needlessly interfered with. Such, however, is not the case; of the 2,020 persons released on the Line, only 92, or less than 5 per cent., were released by the superior officers of the beat, on account of failure of proof; in all the other cases, the breach of the law was clear enough, but the offenders were released on payment of single or double duty, or forfeiture of the smuggled goods, as the case might be; either because the quantity (in the case of salt) did not exceed 5 seers, or because the accused was a traveller, or a stranger, or had some reasonable excuse to

* Or more exactly, Rs. 1,21,62,544.

offer, leading to a presumption, that he had not, deliberately and aforethought, laid himself out to violate the law; it being to those only that do this latter (so far as they can be discriminated) that we confine our prosecutions. When I say that parties were released on payment of double duty, or forfeiture of goods, I do not mean that our officers *enforce* these penalties; all they do is to retain the goods, or, in the case of double duty, to retain them till this is deposited, and then report the case, through their own Collector, for orders, to the Commissioner of Revenue. Thus, there is an ample check both against improper releases, and the improper imposition of even those pecuniary penalties, the only ones, by the way, that can be enforced without the intervention of the Criminal Courts.

Internal.

119. In the Internal Department, the releases arise from a different set of causes. A seizure of what is supposed to be edible salt, is made at a crude factory; the owners of the works deny that the article seized is salt; both parties go before the nearest police officer; the defendant gives security for his future attendance, when required; the Customs Officer receives samples of the seizure, and the rest is sealed up and deposited in safe keeping. The samples then have to be submitted to the analyst. It often happens that, on examination, the salt turns out less pure than was supposed, too impure to warrant a prosecution. No further action is taken in such cases, and these constitute the mass of the releases in the Internal Department. In a few cases, the officers of the Circle find reason to doubt the *bonâ fide* character of the seizure; and where this is the case, obtain sanction to proceed no further with the matter. Previous to the introduction of my new rule, this was, of course, more common than it now is.

PUNISHMENTS INFLICTED.

120. I proceed to examine the nature of the punishments inflicted. The following table exhibits the number of persons who paid fines, and underwent imprisonment in default of fines, respectively, during the past 2 years:—

Branch.	Section.	Paid Fines.		Underwent Imprisonment.		Total.	
		1866-67.	1867-68.	1866-67.	1867-68.	1866-67.	1867-68.
Line	Punjab	44	49	49	29	93	78
	N. W. Provinces	9	22	207	213	216	235
	Central Provinces	45	16	745	726	790	742
	Total of Line	98	87	1,001	968	1,099	1,055
Internal	N. W. Provinces	1,129	479	618	310	1,747	789
	Oudh	1,045	358	538	138	1,583	496
	Total of Internal ...	2,174	837	1,156	448	3,330	1,285
	Grand Total	2,272	924	2,157	1,416	4,429	2,340

Difference in the offenders prosecuted by the two branches of the department.

It will be seen that of the Line convictions scarcely $8\frac{1}{4}$ per cent. paid fines, while of the convictions or prosecutions of the Internal branch, nearly 40 per cent. paid fines, and this, although the average fine per head, on the Line, was little over Rs. 6, while the average for the Internal branch, was over Rs. 12.* The fact is, that the class of offenders that are dealt with by the two branches are, as a body, distinct. The mass of the Line smugglers,

* Of gross fines; the incidence of paid fines was 8-4-4.

are men more or less connected with the criminal classes; have no sort of objection to a month's visit to old friends in jail, and infinitely prefer accepting a month's food gratis and keeping their Rs. 6 to spend on women and liquor, when they come out of jail, to avoiding this imprisonment, at the expense of the Rs. 6, and all it will procure for them. If ever there was a class of offenders, for whom *no* "just sympathy" could be reasonably felt, it is that which comprises professional smugglers of the Delhi, Agra, and Saugor Divisions. The illicit manufacturer, on the other hand, is often, in his own way, a respectable enough man. His misdeeds are confined to making salt contrary to law, and his earnings are not usually ill-spent. He has plenty of friends, and though, of course, before coming into Court, he disguises himself like a beggar, he is often well-to-do, and pays his fine, much as an underwriter does the insurance money of a ship that happens to be lost. The two sets of men are so different, and the action of the Courts in regard to them is so different, that I shall consider the punishments inflicted separately.

121. Of the Line prisoners, 87 only, as will have been seen, paid fines. These aggregated Rs. 590-7-8, and averaged Rs. 6-12-7. They may be thus classed :— Line.

Fines.

Above Rs. 10, and below Rs. 20.		Above Rs. 5, and below Rs. 10.		Below Rs. 5.	
No. of Persons.	Aggregate of fines.	No. of Persons.	Aggregate of fines.	No. of Persons.	Aggregate of fines.
	Rs. A. P.		Rs. A. P.		Rs. A. P.
14	181 2 2	59	395 5 6	14	14 0 0

Of the prisoners who underwent imprisonment, the following is the detail :— *Imprisonment.*

Sentenced for periods between 2 and 3 months.	Sentenced for periods between 1 and 2 months.	Sentenced for periods between 15 days and 1 month.	Sentenced for periods below 15 days.
110	397	205	256

122. Now, it is scarcely, except in extreme* cases, within the province of this department to criticise, even in reports to mutual superiors, the decisions of individual Judicial Officers, but I submit that we are entitled to question the sufficiency, in the aggregate, of the sentences passed by the Courts as a whole; and I would ask, with reference to the above figures, whether they may, or may not, be fairly construed as exhibiting a tendency to undue leniency on the part of our Courts, as a body. Most cheerfully some acknowledge the care and patience with which, almost without exception, our cases are disposed of, but we contend, that having ourselves eliminated all, or (for, of course, we are liable to error) nearly all, but deliberate and willful violators of the law, we have a right to hope that when they do convict the offenders we prosecute, the Courts will inflict sentences more commensurate with the profits of the offence, than they now, as a rule, do. Sentences involving fines of less than Rs. 10, or imprisonment for less than a month (and these constituted more than half of those passed in 1867-68), are, where Line smugglers are concerned, simply inoperative. They positively offer no sort of adequate counterpoise to the tempt- Aggregate punishment seems to indicate a somewhat undue leniency.

* Such as that of the officer who, last year, sentenced one offender prosecuted by us to a fine of 3 pie or 5 minutes' imprisonment.

ation which, amongst the criminal classes, exists to break our laws, and they tend rather to encourage, than otherwise, the offence they are intended to eradicate.

Causes to which this leniency is probably due:

123. This leniency, by which both the State and the people themselves suffer (for we have to prosecute five men now for one who would bring himself within the arm of the law, were a little more judicious severity exercised), is probably due to several causes. In the first place, there exists a widely-spread, natural and kindly, though as I deem it, undeserved and mistaken, sympathy with smugglers of all classes, in all countries, and quite as much here in India, as elsewhere. Passing over my valued friend Mr. H. C. Tucker's earnest pleadings on this subject, it was only in the course of the past year, that one of our most distinguished officers in the service, now a Member of the Supreme Council, officially put on record his opinion, that the just sympathies of the Courts were on the side of the breakers of our Customs laws. It was only on the 15th May, that a district officer, who had been deciding a case in which some Customs subordinates were concerned, remarked in an official letter, addressed to the Deputy Commissioner of Customs: "doubtless there is an antipathy, and *an excusable* one*, in the minds of the people against your department." I might multiply instances, but the existence of the feeling I allude to, is well known, and will probably not be disputed. Let it not be thought that I ridicule this sympathy, it is the natural impulse of a kindly heart; but it is, I contend, undeserved, and owes its origin, partly to a want of knowledge of the real facts, and partly to a consideration of individual results, untempered by a reference to general consequences. (*Vide* also paragraph 45, Central Provinces Sectional Review).

a kindly but undeserved sympathy with the offenders;

A want of knowledge of the real facts of the case.

124. A want of knowledge of the real facts of the case has much to do with the lightness of the penalties inflicted. Smugglers invariably *make up* for their trial; rags, dirt, and a depressed appearance, go far to impress the Courts with a belief of the poverty of the offender; they take him for some desperately poor, honest ryot, too virtuous to steal, who, lacking food, has, this once, to earn a little money to feed himself and starving family, been led into a breach of laws, which are in their essence inequitable and iniquitous to his mind. That is to say, they judge of the man's condition by his looks, and his ideas by an European standard. As a matter of fact, however, the reality is widely different. As far as our experience goes, the *honest*, half-starved villager, no more dreams of regular "bag" smuggling, than of burglary; he may try to slip in four or five seers, without paying duty, and does so often enough; but we never prosecute in such cases; we confiscate the salt; that is all. The smugglers we prosecute will generally be found to be more or less connected with the criminal classes; to be in no sort of want, and to spend the profits of their trade in drink and debauchery. A large portion of the regular smugglers live out of jurisdiction, and, moreover, we are obliged to send our cases in at once, as we cannot keep persons in confinement. We have neither the means, nor the time, for enquiring into and giving *proofs* of a man's previous character, at the trial; they are not caught very often; the proportion of arrests to attempts must necessarily, in most localities, be small. When caught, they never twice give the same name, our men and officers are continually changing, so that although, after sentence, we usually come to find out a good deal about the prisoner, and commonly ascertain him to belong to the class I have described; at the trial, all *we* can prove is, the capture in the act. It would

* The italics are mine.

Renders it desirable that Courts, before passing sentence, should enquire into the antecedents of smugglers.

be well, it seems to me, if all Courts, before passing sentence in these Line cases, would, of their own motion, enquire, through the Police, into the past character and position of the offender. Is he respectable? or is he a haunter of brothels, a gambler, a bhang-drinker, opium-smoker, drunkard? Is he in want, is he connected with the criminal classes? Has he previously been convicted of theft, or smuggling? If, after such enquiries, severe sentences were passed on those offenders, proved to belong to the criminal classes, and to be wholly undeserving of sympathy, the effect would be very great. The uniformity of sentences, passed in some districts, is such that a smuggler knows, beforehand, exactly what capture will entail; all degrees of guilt meet, apparently, a nearly identical penalty, and that penalty one of the lightest. At present, the majority of (if not *all*) the Courts look entirely to us for evidence, whereas it is impossible for us, at the time of the trial, in nine cases out of ten, to furnish any of those facts in regard to the offender's antecedents, and character, that they can so easily ascertain through the Police. I strongly recommend that all Courts be invited to make such enquiries before passing sentence, and deal with offenders accordingly. If a man be a poor and fairly reputable villager, and this his first venture, I should be the last to urge severity; the sentence must be severe enough to convince him, that the trade will not answer, and nothing further; but where the prisoner proves to be a bad character, who (as my officers aver, many now do,) merely follows smuggling as a profession, because it is more profitable and entails less serious consequences, than stealing, I do most earnestly advocate the utmost severity the law permits of,—a fine, heavy enough to make it difficult to pay, or in default, 6 months' rigorous imprisonment.

As a rule, the profits realized by smugglers, and the many chances they enjoy of escaping capture, are not sufficiently realized.

125. As a rule, officers scarcely realize how many chances the smuggler has in his favor, and how few times he is likely to receive punishment, out of the total number of times he breaks the law. If we could be sure of catching a smuggler every time, no Court punishments would be required; to confiscate his salt would be all sufficient; he would not make the attempt often, finding it always a losing game. Again, if we could be sure of catching the smuggler every other time he made the attempt, the confiscation of his salt and a month's rigorous imprisonment would fully outweigh the Rs. 2 to 3 gained by the successful venture. But such is not and never can be the case where darkness, physical difficulties of the country, and superior local knowledge, befriend the smuggler. I think it so important, that this feature of the case should be fully understood, that at the risk of being tedious, I venture to give an illustration of the position of the smuggler in the Saugor Division, conspicuous both for the great prevalence of the offence, and the extreme average lightness of the penalties inflicted.

Illustration derived from the state of affairs in the Saugor Division.

126. A dark night, two men, who have already been each six hours on duty during the day (besides working hard in off hours at the hedge), have between them to watch closely, for six hours, $1\frac{1}{4}$ miles of the Line, intersected by numerous nullahs and ravines, and interrupted by stony mounds and clumps of jungle. Two smugglers, with a maund of salt each, leave some neighbouring mart above Line, soon after dark; by 11 o'clock they are within $\frac{1}{4}$ of a mile of the Line. One creeps on, under cover of jungle, or ravines, till close to the Line; he soon finds out whether the watcher is near or not; if the former, he waits till he patrols

onwards ; the moment the coast is clear, he silently passes the Line, easily breaks the hedge, nowhere, for reasons explained in the Divisional Review, of much use, and, in many places, altogether wanting, and makes his way to where a third accomplice is waiting for him, ¼ of a mile or so below Line. This man takes charge of the salt, and carries it beyond jurisdiction, while the first smuggler returns by another route for the second load, which he similarly runs, and himself carries to its destination. But there is a patrolling party, above or below Line ; if these are very sharp, and all the Line men also keep sleepless watch, some one of the three smugglers may be seen once in a way. If out of eight bags thus run, three are stopped and seized, it is the utmost ; but the *bearer* is not caught once in three times; the moment he is seen, he drops the salt, and better acquainted with the country than the men, usually, what with the darkness, and the bad ground, makes his escape. Of course, if the pursuers are very vigorous, active men, he may be captured, but how many such are we likely to have? We, who give Rs. 5 a month, hard work all day, and half the night, and never a single night's unbroken rest, while the coolies on the Railway works, not many miles distant, are earning Rs. 6 to 8 a month, for infinitely less exhausting labor. No possible exertion of the men and officers, in many places of the Saugor Division, will enable them to ensure the capture of above one smuggler and three loads, out of every eight attempts, as an average, and this is more than can be justly looked for. Now, what are the financial results to the illicit trader? Salt was selling at Bhopal under Rs. 3-8 a maund, and inside the Line, owing to the sudden failure of the Bunjarah carriage (*vide* Central Provinces Sectional Review para. 68) at Rs. 9, Rs. 9-8, Rs. 10 and Rs. 10-4 a maund. On each maund run there was a net profit of Rs. 6 at the lowest. Three men would make eight attempts with ease in a week. On five, which were successful, the profit would be Rs. 30, from which, deduct Rs. 10-8 for the loss of the three ventures captured, net profits Rs. 19-8, and one smuggler is captured. The fines average, in this division, below Rs. 10 ; but as in default, the sentence is only 15 days' or 1 month's imprisonment, the fine is never paid, and the smugglers share, between them, the Rs. 19-8. Of this, the smugglers who escape have Rs. 3 each for a week's light night work (the days and off nights being spent in opium, mudduck, and bhang, smoking and eating, or with women); and Rs. 13-8 go to the third man, who, besides the week's work, has had a month's pleasant social intercourse in jail with convict friends, whom he could not otherwise have seen, and to whom he carries news of all that has transpired in their family circles. It is not too much to say, that if the Courts had imposed, on conviction, fines of from Rs. 30 to 50 on all the first 20 undoubted smugglers, with the alternative of six months' hard labour, instead of having to prosecute, as we had in Saugor, 280 men, we should not have had 100, and instead of the 4,000 maunds which I estimate to have been smuggled in that division, not 1,000 would have escaped duty, and, what is more important, instead of the shortness of salt continuing as it did, owing to the petty traders relying on the uncertain supplies illicitly received, legitimate trade would have at once vigorously undertaken the import, undeterred by fear of serious competition on the part of smugglers. The only results here, as elsewhere, of what I deem mistaken lenity, has been a vast increase of smuggling, necessarily demoralizing to the people, large profits to the criminal classes, considerable loss to Government, waste of the Court's time in having to

try very numerous cases, discouragement to legitimate trade, and a more prolonged continuance of high prices than there would otherwise have been, to the great inconvenience of the public generally.

127. Turning now to the Internal Department, little need be said about the punishments inflicted, considering the class of the offenders usually prosecuted; the aggregate, though very moderate, does not seem open to objection on the score of inadequacy. The following details will be useful for comparison with similar ones given above for the Line:— Internal.

Detail of fines imposed in cases prosecuted in the Internal Branch.

Below Rs. 250 and above Rs. 100.		Below Rs. 100 and above Rs. 50.		Below Rs. 50 and above Rs. 30.		Below Rs. 30 and above Rs. 20.		Below Rs. 20 and above Rs. 10.		Below Rs. 10.	
No. of Persons.	Total of Fines.	No. of Persons.	Total of Fines.	No. of Persons.	Total of Fines.	No. of Persons.	Total of Fines.	No. of Persons.	Total of Fines.	No. of Persons.	Total of Fines.
30	3,559	20	1,071	32	1,260	113	2,633	377	4,363	713	2,845

Detail of imprisonments undergone, in default of payment of fines, in cases prosecuted in the Internal Branch.

For six months.	Below six months and above three months.	Below three months and above two months.	Below two months and above one month.	Below one month and above fifteen days.	Below fifteen days and above ten days.	Below ten days.
No. of Persons.	No. of Persons.	No. of Persons.	No. of Persons.	No. of Persons.	No. of Persons.	No. of Persons.
13	33	51	206	99	8	38

It will be observed that while, as a rule, the Line smuggler (although, perhaps, incapable of injuring the revenue quite as much as the illicit manufacturer), certainly deserves as severe a sentence; as a matter of fact, he gets off on the average with less than half the punishment.

128. Besides punishments inflicted by the Criminal Courts, certain penalties may be enforced by the superior Revenue Authorities, on the recommendation of the various Customs Collectors, against persons who, though not deemed fit subjects for a criminal prosecution, have yet transgressed the law. These penalties are the levy of double duty, or the confiscation of the goods sought to be smuggled. During the past year double duty, as follows, was thus levied:— PENALTIES IMPOSED IN THE REVENUE DEPARTMENT. Double duty.

On Salt	...	...	Rs. 12,789
„ Sugar	...	...	„ 1,609
		TOTAL	Rs. 14,398

In other words, about 0·1 per cent., or one maund in a thousand that crossed the Line, was subjected to this penalty.

129. Confiscation of goods, except in the case of actual smuggling, is very rarely resorted to; but dutiable goods, seized in the possession of smugglers, committed to the Criminal Courts, or (which is far more common) dropped by smugglers when escaping from pursuit, are always confiscated. The following Confiscations.

table exhibits the total amount of goods thus confiscated during the past year, with their approximate value to the owners, when seized:—

Section.	Salt.	Sugar.	Total.	Estimated Value.
	Mds.	Mds.	Mds.	Rs.
Punjab	534	66	600	950
North-Western Provinces	736	196	932	1,250
Central Provinces	3,501	34	3,535	8,700
Total	4,771	296	5,067	10,900

Scarcely any sugar is ever seized; the duty is too light to make it worth while to attempt to smuggle it. Hence, whilst against 37,36,100 maunds of duty-paying salt, 4,771 maunds, or about ·12 were seized, against 24,60,346 maunds of sugar, only 296 maunds, or about ·012, were similarly seized. In other words, with reference to the proportions of the trades, ten times as many attempts are made to evade payment of the salt duty, as to escape that of the sugar duty. I forgot to notice above, that of the whole double duty, more than Rs. 9,000 pertain to the Central Provinces, and from the last table it will be seen that, out of the Rs. 10,900 worth of goods confiscated, Rs. 8,700 worth were seized in the Central Provinces. The reason of this disproportion will be obvious, when I come to discuss the question of smuggling. As above mentioned, confiscations, and the levy of double duties, only take effect under the orders of Commissioners of Revenue, on recommendations of Collectors of Customs. It speaks well for the judgment of these latter officers, that out of 3,679 such recommendations, made by them to Commissioners during the past year, sanction only had to be withheld in 12 cases. In 3,654 cases, it was sooner or later accorded; 13 cases remaining pending at the close of the year.

SUMMARY OF THE PENAL ACTION OF THE DEPARTMENT.

130. The total penal action of the department may, therefore, be thus epitomized:—

One thousand four hundred and sixteen persons have undergone terms of imprisonment averaging one month, six days, and four hours.

Nine hundred and twenty-four persons have paid fines, averaging Rs. 8-1-9 per head, and aggregating	Rs.	7,507	0	0
Double duty has been levied to the extent of	,,	14,399	0	0
Goods have been confiscated to the value of	,,	10,900	0	0
Total ...	,,	32,806	0	0

I look confidently for a reduction, as time goes on, of punitive measures, especially if the Courts second our efforts by a little wholesome severity in the case of professional smugglers; but even as it stands, this schedule cannot be considered an extravagant one, for enforcing a system, such as ours, in a population of over 45 millions, and realizing a Customs revenue of over Rs. 1,21,00,000, on 62 lakhs of maunds of sugar and salt.

SMUGGLING, across the Line.

131. The subject of smuggling, to which I must next allude, has been discussed in detail in the various Sectional and Divisional Reviews, and may, therefore be comparatively briefly disposed of here. So far as smuggling proper, *i. e.*, across the Line, is concerned, it has, everywhere, on the whole, been well kept in check, except in the Saugor and Raipore Divisions of the Central Provinces. In Saugor, the smuggling, though excessively troublesome, is petty in character, and will be got under, before very long, when the divisional hedge is in better order, and we have the railroad carrying cheap Kokan all along the rear of the Line. In Raipore, the smuggling is of a more formidable character, and is daily becoming more and more so, as the people discover the utterly untenable character of the existing Line. This division *must* be strengthened at a cost of Rs. 15,000 per annum, as fully explained in the Sectional and Divisional Reports, (paras. 42, 126, 128, &c., C. P. Sectional Review). Of the 25,000 maunds, estimated to have succeeded in crossing the whole Line, during the past year, some 4,000 maunds must be put down to Saugor, and 14,000 maunds *at least* to Raipore.

has been well kept in check except

in Saugor.

in Raipore:

132. It is not, however, across the Line that smuggling has most injured either our revenue, or that of the Empire generally. The great blot in our present system is the gap that exists between our terminus at Samasingha and the sea (*vide* C. P. Sectional Review, paras. 13, 28, 29). Through this gap, by way of the Tributary Mehals, great quantities of salt round our Line, permeate the north-east of the Chutteesgurh, and the west and centre of the Chota Nagpore country. What this salt is, it is impossible to say; it is said to be both half-duty Madras salt and Bengal salt; but the prices at which it is sold, hundreds of miles away from the Coast, leave no doubt that much of it *must* be smuggled; whether out of Madras, or from unlicensed works about the Chilka Lake, it is at present impossible to say. Our Line in Raipore being quite new, the people have, this year, for the first time, taken the circuitous route to Ranchee, *viâ* Bamra. This year, fully 30,000 maunds that, in past times, would have gone (and did go in the previous year, when the Line was first laid down,) up through Sumbulpore to Ranchee, paying duty, rounded our terminus and escaped duty. Here alone is a loss of Rs. 45,000, even supposing this to be half-duty Madras salt; but if it be, as it is shrewdly suspected, smuggled salt, and my proposed rule* be adopted, it may indicate a loss of nearly a lakh of Rupees. This loss will increase, as the circuitous route becomes better known, but even then, ours will be the smaller portion of the loss. The Bengal and general Imperial loss is far greater. The whole Tributary Mehals and Chota Nagpore are, more or less, pervaded with this either half-duty paying or else wholly free salt. Locally, the amount so imported is estimated very highly, but it is probable that, under no circumstances does the amount that thus in part, or wholly, escapes duty, fall short of a lakh of maunds. Here, therefore, at least 1½ lakhs, (and probably if, as is believed, much of it is smuggled salt), a good deal more is lost. At the *lowest* estimate, the State certainly loses 2 lakhs a year *now*, and it is very probable that the real loss considerably exceeds this, and will increase yearly. I had the honor personally to lay this matter before His Honor the Lieutenant-Governor of Bengal, and at his request, I made enquiries, with the view of ascertaining the probable cost of an efficient Line to connect the terminus of the Central Provinces Section with the sea. It appeared that the total cost of the required Line,

round the Line.

between Samasingha and the sea coast.

Loss at lowest estimate of 2 lakhs a year, probably more, and will increase.

* *Vide* rule, para. 58, and C. P. Secl., paras. 9, 10, 11.

Extension of the Line to the sea absolutely necessary if the present differential rates are to be maintained.

including all officers, contingencies, &c., with 2-mile posts, might be estimated at Rs. 1,25,000 per annum. I am of opinion that if the present differential rates are maintained, this extension of the Line is *absolutely* necessary. The Central Provinces' terminus would then be at Sonpore, whence the new Line should run, down the southern bank of the Mahanuddee, to some convenient place between Kundpara and Bankeegurh, and thence across to the sea, keeping as much Bengal territory inside the Line as is compatible with excluding the Chilka Lake. Sir R. Temple is of opinion (I believe) that there would be no difficulty in arranging for the Mahanuddee section of the Line. The exact course of the portion running from the Mahanuddee to the sea can only be decided in consultation with the local officers, after one's self inspecting the ground. This matter is one of some urgency, and every month that action in it is delayed, the State is so much needlessly out of pocket.

Inside the Line.

133. Inside the Line, we have two very weak points, the one in the Punjab, the other in Behar. I have already noticed

In the Punjab.

(para. 18 and notes) the manufacture of salt in the Punjab, and I am of opinion that, in the Cis-Sutlej States, an establishment, similar to that now working in Oudh, should be put in operation. I myself, from samples of salt purchased in numerous bazars, entertain no doubt of the great injury that this manufacture is now doing us. In our own territories, it might be effectually put down, the same relaxation being given as in Oudh and the North-West Provinces, so as to prevent criminal prosecutions of persons only making salt for their own personal consumption (in which case no man makes a seer of earth-salt at a time) and not for sale. As regards the Native states, if no arrangements could be made to induce them (which could most probably be done) to prohibit their subjects from exporting this earth-salt into our territory, it would be easy to declare all their frontiers Customs lines, for the purposes of the Act, and all such salt (which is unmistakeable) crossing such frontier, without a pass from our nearest Customs officers, liable, with its carriage, to confiscation, and the bearer to punishment. It would not be necessary to lay down any lines, our establishment moving about to prevent illicit manufacture in our own territories, and the various Tehsildars and their establishments, whose aid *at first* it would be proper to secure, would soon prove to the public that it was not worth while trying the thing; and though we should not perhaps absolutely stop the salt out, to a maund, we should diminish its income by $\frac{9}{10}$ths in a very short time.

I submit that this matter is deserving of immediate attention.

In Behar.

134. In regard to the wholesale illicit manufacture, said to be carried on in Behar, chiefly in the Mozufferpore and Sarun districts, I have little to add to what I have already said (para. 20 and note). An official representation on the subject is now under consideration by His Honor the Lieutenant-Governor of Bengal. The working season, however, the *only* proper season for enquiries, has, this year, passed away, and I am much impressed with a conviction that we ought to have this illicit manufacture under control, before the *next* working season commences. Several lakhs of Rupees have here, I fear, been sacrificed, yearly, for many years past, and I submit that in the present state of Imperial finances, we ought, as soon as may be, either to make *sure* that such is not the case, or summarily prevent it for the future.

135. Two other points require notice. A manufacture of salt is going on (*vide* paras. 15 and 16) in two Native states at least, that lie within our cordon, of which we know absolutely nothing reliable. In Rewah, there is reason to think that the manufacture is assuming important dimensions. In Rampore, it is believed to be insignificant, but in both cases certain information is required, and this can only be attained by the deputation of a special officer to look closely into the matter. It may cost a thousand Rupees to do this, as we cannot spare a single officer from his regular work, without appointing a substitute, every man having as much, and, in fact, more than he can well do, as it is. But the questions involved are of too great importance for us to be left in uncertainty about them; and I, therefore, solicit permission to depute a competent officer to make the necessary investigations: his place being temporarily filled up by one of a lower grade, his by one of a lower, and so on. There is yet another internal manufacture, in regard to which information is required,—I mean that at Mundee (*vide* para. 17), but into that I propose myself to enquire, when at Simla this year.

Manufacture in Native states.

Rewah.

Rampore.

Mundee.

HEDGE.

136. Of the hedge, that great adjunct to our preventive force, I need not here say much. Details of its present state and prospects will be found in every Sectional and Divisional Review. Generally, I may say that, in the dry hedge especially, very great improvement has been effected, during the past year. I am not altogether satisfied with what has hitherto been done in the matter of the hedge, but this is because there has been, more or less, a want of system, and not, as a rule, because it has not been worked at. That it has been worked at, may be judged from the fact that by the close of April, there were in the Punjab and North-Western Provinces Sections, 400 miles of really *good* dry hedge. One mile of good dry hedge requires 250 *tons* of material; 100,000 tons of material may be safely allotted to these 400 miles, and indifferent as the dry hedge is, in most parts of the rest of the Line, it is probable that at least 50,000 tons more have been put down in the remaining 1,400 miles. The material most generally used, is the dry *Jharberi*, or dwarf *Zizyphus Jujuba;* it rapidly decays, is a perfect paradise for white ants, and disappears, in hundreds of tons, before the dust storms of the Punjab and the floods of Bundelcund. On an average, half of this material has to be renewed every year. All this to be cut, carried and stacked in position by our men, who are six hours on sentry duty, each day and each night, and who, where well looked after, are at present, I honestly believe, the hardest-worked and worst paid force in India,—I am not sure that I may not say in the world. It is not only, however, the great labour that this work entails, which makes the dry hedge objectionable; in many places, material is scarce, in some, unprocurable, and though we have avoided this successfully during the past year (sometimes at the expense of giving up all attempt to make a hedge), there is always the danger of those disputes and quarrels between our peons and villagers, which have often happened in past years, again breaking out. Yet for the present, a dry hedge we must have in many places, and there are localities in which no live, or green, hedge can ever be hoped for. It is clearly not seemly that where the villagers cannot, or think they cannot, afford to allow us to take the necessary material, that we should continue to appropriate their property, even though by tact and a mixture of persuasions and high-handedness, we succeed in avoiding even complaints. To

Dry

meet this difficulty, therefore, in localities in which material is scant, I propose to move the several Governments to permit us to take up, in due form, under the public purposes land appropriation laws, numerous small plots of waste and uncultivated land contiguous to the Line, on which we shall sow babool and other suitable thorny trees, and so grow our own material. This is my own solution of what has long been felt to be a great departmental difficulty, and it is, I believe, a satisfactory one, and, as we shall only apply for waste lands, will cost little, if any thing. Heretofore, the practice of the department has been far from equitable. *We* have fined the peons, if they did *not* get the necessary material; while if they *did*, and complaints were made, the district officers have fined them, and the department has *not* made good the fines. The plan I propose will put a stop for good to this undesirable state of affairs. It will only be in certain localities that it will be necessary to adopt it, but there, its utility will be great.

Live.

137. Our great object will be to secure, wherever this is possible, a good live hedge, and my belief is, that with more systematized efforts (full instructions for which have now been issued to every officer from the banks of the Sutlej to those of the Taptee), more may be done in this matter than has hitherto been thought possible. I reckon that there are 180 miles only, at the present moment, of *thoroughly* impenetrable live hedge in existence. Throughout the Punjab and North-West Provinces Sections, say fully 600 miles, the hedge has been sown year after year, but without thoroughly satisfactory results in more than the 180 miles above mentioned. In half of the remainder the hedge is a pretty continuous Line, but would be everywhere pervious but for the dry hedge backing. In the rest, the hedge, where it exists at all (which it does almost everywhere), is a mere line of persistently dwarf seedlings, or of irregularly scattered, disconnected bushes. Rats, white ants, hail, frost and floods, barren and stony lands, bare rocks, absolute want of water, &c., in different places, have heretofore baffled exertions, which, though earnest enough, were often intermittent, and generally without system. Every one is ready with schemes for remedying this, but every scheme involves extra expenditure, greater than I am at present prepared to advocate. My belief is that very much of our present indifferent hedge may be rendered perfect, without extraordinary expenditure, and when, after trying means entailing only moderate (if any) extra cost, which the grant, placed last year at my disposal, enables me to do, all that is possible has been done, and only certain irremediable blanks remain, I shall be prepared to come up to Government with full details of each gap, and an estimate of the expenditure necessary to fill it by a live hedge, and it will then be for them to consider whether it will be worth while to do this, or whether it will not, on the whole, be wisest to content ourselves with a dry hedge. At present, a variety of experiments are being tried. In some places bamboos are found to answer beyond all expectation; in others, digging a deep trench and mixing better earth with the soil of the place, promises to succeed. In some places, a low narrow bank of earth thrown up, has furnished a thriving row of young plants, where excess of water has previously always destroyed the seedlings. The prickly pear (*Opuntia*) is found, in places, to succeed rapidly. Nothing but local experience and discrimination, based on a consideration of the physical conditions of existence in each locality, will help us. System is absolutely necessary, but not of that nature which would

generalize a single plan for such diverse climates and soils. Every single officer, from Fazilka to Boorhanpore, is, and has been, at work, and will be kept at work, at this important duty, and by this time, next year, our position will, I confidently expect, be vastly improved. Beyond Boorhanpore less can be done; in long stretches there is no Line; merely patrolling parties, many miles apart, and there the dense primeval forests, swarming with wild animals, afford all sufficient protection. On other long stretches, the Line is too thin to permit much being done, the men being too few to do the work. In some localities, however, where posts are closer, and where it is most necessary, a hedge is being reared, but whenever our Indian salt duties are equalized (as sooner or later I take it they must be so) this portion of the Line will be abandoned, and I am therefore less anxious about the hedge. Nevertheless, even here what *can* be done, will be done, since no one can yet tell how soon, or how late, the Line may be given up.

Substitutes for.

138. There are places where no live hedge can ever be grown except at enormous cost, and where material for a dry hedge can neither be procured, nor grown, within any reasonable distance. Here other barriers must be resorted to. In some places, scarping ravines promises to be successful; in others, loose stone walls, the materials for which lie in inexhaustible abundance on the very spot, may be tried. The work is very hard for the men, and can only be slowly proceeded with; but once done, it will last with but little labor, in the way of repairs, as long as the Line does; and in this respect, therefore, possesses an advantage over every other kind of fence.

ESTABLISHMENT.

Vast amount of work done.

139. In turning now to the establishment (officers and men) to whose exertions the State is indebted for the realization of our large revenue, I think I ought to give some idea of the magnitude of the work done. During the year, the men of the force patrolled between 14 and 15 millions of miles; the Line officers, of whose mileage we have a record, patrolled over 2,50,000 miles, of which nearly $\frac{2}{3}$rds was during the night; the officers of the Internal Branch travelled over 34,000 miles. I myself travelled close upon 6,000 miles, of which more than 600 miles was regular Line marching, and 800 stage marching, without tents. The Deputy Commissioner travelled considerably *over* 6,000 miles, of which no less than 1,200 miles was regular Line marching. At the dry hedge, the work has been incessant, and during the year, the men have cut, carried and stacked on it fully 100,000 tons of thorny brushwood; about 1,000 maunds of seed have been collected, and ground, more or less prepared, for sowing, along 400 miles of the Line. In one single division, 15 lakhs of maunds of goods passed the Line in 37,516 despatches, and were, of course, all duly weighed and examined in common with the whole 62 lakhs of maunds that in about 140,000 despatches crossed the whole Line. This report, imperfect as it is, will convey some idea of the number and importance of the questions that are constantly engaging our attention.

OFFICERS.

Enumeration of those who have specially deserved commendation.

140. A great number of my officers have, on the whole, done well, and have been noticed accordingly in the Divisional and Sectional Reviews, but the following are those who seem to me to have most especially deserved the approbation of Government. Mr. F. W. Vere, Deputy Commissioner of Customs. To this gentleman's loyal devotion to his duty, unceasing industry, and unequalled experience in departmental matters, I owe more than I can well express. Few men have the good fortune to work with so thoroughly competent and satisfactory a coadjutor, and

if ever any subordinate deserved well, both of the Government and his immediate superiors, it is Mr. Vere. In the course of my whole official career, I have met with no single officer, who combined so much energy, industry, and ability, with such entire subordination of his own private pursuits, comforts, and inclination to the interests of the State. Working for nearly a year in *daily* communication with him (even when we were furthest apart), I know this, as no one else can know it, and can vouch, that, however unimportant, Imperially, his present office may be deemed, he is an officer capable of far higher things, and a servant of whom any Government may be justly proud. Mr. W. W. Wright, Collector of Delhi; Mr. Bell, Collector of Agra; Mr. W. Blewitt, Collector of Hansie; Mr. Hay, Assistant Commissioner, Oudh; and Messrs. E. C. Nunn and F. R. Blewitt, Officiating Collectors of Hoshungabad and Jhansie, and Mr. Ray, Inspector, Doab, have, each and all, so conducted themselves, in *all* matters, connected with the discharge of the duties of their several appointments, during the past year, as to merit this special and prominent recognition of their services.

Attempts to improve the general standard of officers.

141. Many excellent officers as our department includes, it became early apparent to me, that it also contained several by no means mentally or physically competent to do credit to the service; moreover, not a few seemed to have been admitted so late in life as to leave little chance of the State's getting a fair amount of work out of them, before the 55 years' rule would necessitate their resignation on pension. No rules, of any kind, appeared to exist, or to have been ever followed, in regard to the selection of candidates for employment. I, therefore, after I became fully cognizant of what was required from our officers, laid down certain rules for the admission of candidates to all future vacancies, requiring, as a *sine quâ non*, the possession of certain moderate qualifications. These rules* may hereafter have to be rendered more stringent, but they will, even as they are, raise the standard of fresh admissions.

Initial qualifications laid down as essential to admission into the service.

A better knowledge of the Vernacular insisted on.

142. One of the defects that most struck me in our existing system, was the want of a competent knowledge of the Vernacular, in too many of our officers. Some few of the older officers possessed a very minimum of acquaintance with the language, while comparatively few were able either to write it intelligibly, or even to read tolerably, clearly written papers. In regard to the seniors it was, of course, hopeless to attempt to alter the existing state of affairs, but reading and writing the Vernacular have

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* INITIAL QUALIFICATIONS OF A CANDIDATE FOR EMPLOYMENT AS ASSISTANT PATROL IN THE IMPERIAL DEPARTMENT OF CUSTOMS.

1. Must not be more than twenty-five years of age.

2. Must never have been forced to leave either the Army or the Civil Service: nor have been dismissed from, nor forced to resign, any branch of Government employment.

3. Must give good references as to sobriety, honesty, and unexceptional moral character.

4. Must furnish a medical certificate, certifying that he is in good health, and of sound constitution; capable of enduring exposure; equal to great bodily exertion, and fitted to ride on horseback.

5. No one will be admitted who suffers from rupture, lameness, defects of vision, epileptic fits, or other bodily defect calculated to interfere with constant activity.

6. The candidate must have received a good English education; must write a good and legible hand; be competent to compose a properly spelt and grammatically worded letter in English; must possess a competent knowledge of Arithmetic; and such a colloquial familiarity with Oordoo as will enable him to make himself understood in that language.

On satisfactory evidence of qualification, as above set forth, the candidate may be appointed as a Probationary Assistant Patrol; subject to confirmation if, within the space of one year from date of appointment, he succeeds in passing the prescribed departmental examination, and has, meanwhile, conducted himself to the entire satisfaction of his superiors.

been made a part of the departmental examination, which a probationary Assistant Patrol has to pass, before he is recommended to Government for confirmation. Promotion, from Assistant Patrol to Patrol, has also been made contingent (amongst other things) on being able to read and write Hindoostanee fairly. It speaks well, I think, for the good sense of the officers, as a body, that after learning my views on this subject, not only Assistant Patrols (for to them promotion depended on it) but even the majority of the Patrols set steadily to work to acquire this necessary qualification. Much remains to be done, but the progress already effected is far beyond what could have been expected, and is to me most satisfactory.

Necessity of educating our officers on topics connected with the interests and administration of the department.

143. It is hopeless for the State to expect the full advantage it might derive from the services of its officers, if it keeps them, or suffers them to remain, in entire ignorance of all that is going on, out of their own limited spheres of action. If an officer is to observe intelligently, and record, in an useful shape, the results of his observations, he must know what the matters are in regard to which information is required; he must be posted up in previous observations of others, and possess such general knowledge of most questions, as may enable him to appreciate the bearing on them of the innumerable, in themselves petty, facts, that, in his daily intercourse with the people, hourly pass (at present devoid of all significance) before his eyes.

As now situated, our officers, as a body, are utterly unable to afford any assistance in the solution of some of the most important problems connected with the working of the salt laws:

144. As our officers are now situated, confined, as a rule, to a beat from 10 to 30 miles in length, never meeting any one but the officers of contiguous beats, and perhaps their Collectors twice, and their Commissioner or Deputy Commissioner, once in the year; with no single work, except the "Manual" to enlighten them on any subject, connected with their work, its general objects or results, it cannot be wondered that, out of 160 annual reports submitted by them this year, not five contained any useful information on any subject on which information was required. I do not blame them for this, but it is a state of things that ought not to continue. The loss of power to the State is incalculable. Fully 100 of these officers, if properly educated in such matters, or given the means of educating themselves, would be able to collect for us a mass of facts, bearing upon almost every moot departmental question, that, properly classified and digested, would set these at rest for ever. The general absence of knowledge on the Line, in regard to all questions (however departmentally interesting) beyond the routine discharge of the daily work of the beat, is not only, I think, to be regretted, but to be vigorously combatted.

whereas, if furnished with the means of educating themselves on such topics, their observations would, taken as a whole, be invaluable.

Copies of important reports to be furnished to all officers.

145. Up to the present time, even Collectors have not been furnished with copies of the annual reports. Soon after taking charge, I sent copies to each Collector of those portions of the last report affecting their own divisions, but more than this could not be done. In future every office on the Line, and in the Internal Department, should be furnished with a copy, not only of the annual report (this one will make a beginning), but of every important report bearing on departmental subjects. Books, too, of reference should be supplied. First and foremost, a copy of Plowden's salt report should be in every office. I solicit permission to procure the requisite number of copies.* From time to time

Books on departmental subjects to be supplied.

* This was originally printed in Calcutta, and a large number of copies deposited in the Home Office. I applied there, but was informed that none are available. It was also reprinted, I believe, in the proceedings of the House of Commons, and copies will probably be available from the printer. If not, we must reprint it in a smaller form. Many of the appendices are no longer useful, and many may be compressed.

works are published at home, which should be in the library of every office; for instance, Dr. Crace Calvert has just delivered a course of lectures, at the Society of Arts, on salt, the products obtained from it, its uses in the arts and manufactures, &c. I have written for a copy, and if the work answers our expectations, I should wish every officer to have one. In a word, I want my officers to be educated in all matters connected with the department, so that the State may have the benefit, not only, as now, of their physical, but also of their intellectual, energies.

A special Gazette for the circulation throughout the department, of orders, &c., required.

146. It is essential that the officers of the department should be made acquainted with all orders issued by the local Governments or the Government of India, in regard to them; that they should receive, promptly and simultaneously, all circulars issued by the head of the department; and if a proper tone is to be maintained, it is essential that all promotions, changes, transfers and the like should similarly be made known to them. At present, this is impossible, and I, therefore, solicit permission to establish a small Departmental Gazette, for the record and publication of such matters. How little has heretofore been known in such matters may be judged from the fact, that I found fully half the officers on the Line ignorant of their own standing in the service, of the names of at least half of their brother-officers, and without the remotest idea of where the mass of these were posted; complaints of unfairness of promotion and supercession were made, in good faith, by men who, on its being looked into, proved to be far junior to those whom they believed had superseded them. The half-yearly disposition and seniority lists, that I have commenced publishing (copies have been submitted to all the various Governments, Boards, &c.), and of which one copy has been furnished to every office, will (besides furnishing in a compact form much information about the Line), prevent much of this, but a small fortnightly Departmental Gazette is also necessary. Amongst other advantages, this Gazette will keep the various Governments informed of all that is doing in the department. In conclusion, I may add that, to enable officers better to realize the nature of the statistics and information that they are required to collect and supply, I have drawn out for them skeleton forms of report on the same principle as those prescribed by the North-Western Provinces' Board of Revenue for the use of Collectors in the submission of their annual Revenue Administration Reports.

Half-yearly disposition and seniority list published will also be useful.

Employment of Natives in the higher posts.

147. The question of more extensively employing Natives in responsible posts, is one, that has, of late, justly excited much attention. Having, for many years, steadily and persistently advocated this, I feel especially bound, as the Head of a Department, not to conceal the fact, that my experience, in my present position, has led me to believe, that the views I formerly expressed need some qualifications and reservations. My predecessor, Mr. Money, after many years' trial, had come to the conclusion, that, with rare exceptions, the Natives, *who could be tempted into our service* by the salary we can offer, are unfit for the position of Patrols and Assistant Patrols. I entered the department with somewhat different views, and having before long had abundant proof of the correctness of opinions (to which even my predecessor had reluctantly come), I have taken some pains to discover, why it is that the same class of Natives who so far excel Europeans, of the class obtainable, for such posts as Tuhseeldars and subordinate Civil Judges, should be so infinitely inferior to them as Line officers. There appear to be several

causes for this. In the first place, great bodily activity, incessant locomotion, indifference to sun, wind, weather, and his night's rest, not once in a way, but throughout his whole career (until he rises to a Collectorship) is essential to efficiency in the Line officer. Now this indifference to physical fatigue and exposure, this capacity for great bodily exertion, is scarcely to be met with amongst the educated middle and lower classes of Natives, the men who become our Tuhseeldars and Sudder Ameens. We find it in the Native sportsman, the herdsman, who becomes the soldier, and others amongst the lower classes; none of whom could, of course, fill posts such as I refer to; and we find it, (but, alas! rarely now-a-days) amongst Native gentlemen of family, who are sportsmen. These, however, are few and far between; rarely possess even the moderate educational qualifications we require, and what is most important, *will not* undertake a service like ours for Rs. 125 a month. Any one who knows them will realize from what I have said, that these posts cannot be well suited to the "*Ahl-kulum*," the people of the pen, or "writers," whom alone we could appoint to them. Amongst Europeans, on the contrary (young men fond of sport), this restless laborious life has a charm. Numbers, it is true, enter the department, to leave before their term of probation expires, but of those who remain, the vast majority do this perpetual knocking about at all hours, and in all weathers, more or less, *con amore*. They can do their patrolling work as well, if not better, gun in hand; the excitement of the sport, relieves the constant out-door life of much of its unpleasantness, and they live, on the whole, happy, healthy lives, doing good service to the State, where their Native *confréres*, either break down sick, (after innumerable protests about the hardness of their fate), or else simply slur over their work. It is not that there are *not* Natives who *can* do all that is required. I have not a better Patrol on the Line than Nizamooddeen Khan, but then he is a Native *gentleman*, an enthusiastic sportsman, as rough and ready as any European; but it is, that for the advantages we offer we cannot now obtain Natives like Nizamoodeen Khan, men possessing the requisite qualifications in this way, and at the same time with any decent share of education. On the other hand, we *can* get fairly educated English youths, many of them sons of gentlemen, who can and will do the work, and who prefer the rough adventurous life, small though the stipend be, to regular office work on better pay. There is another point in which the classes of Natives, alone available for our appointments, conspicuously fail. They lack the power of commanding respect, and enforcing discipline, amongst large bodies of men. An Assistant Patrol may have 100 men under him, amongst whom the strictest discipline must be enforced, and he most probably has never any brother officer within ten miles of him. The late lamented Colonel Fisher, whose knowledge of the language and character of Natives, was only equalled by his liking for them, once told me that the youngest Cornet, who could speak the language, would keep better discipline in a detached troop, than the oldest Rissaldar. At the time, I neither understood, nor believed this, but I find it to be a literal fact on the Line. The youngest European Assistant Patrol,* who can talk the language, will keep up a more healthy tone of discipline and subordination than the oldest Native Patrol, unless this latter, and we have only one such, happens to be a man of Nizamooddeen Khan's stamp, a stamp that I have sought for in vain. Somehow a sort of intimacy and

* Of course there are exceptions; but these are soon discovered, and do not long remain with us.

familiarity, subversive of that quasi-military discipline, that in a huge force like ours, *must* be maintained, grows up invariably between the Native Patrols and a particular set of their subordinates; while there is always another set, who, do what they will, are always in the black books. Travelling along the Line, the difference in the "set-up" of the force in beats over which Native and European officers respectively have long presided, is very marked, and altogether in favor of the latter. Departmentally, there is another point; an European officer, if he only talks the language well, and is civil and kindly, can do double as much with the zemindars and people around him, as any Native (of the kind we alone meet with as candidates for employment) ever can. This is where Line work is concerned, for even in our department, there are posts such as the supervision of the Sooltanpore works, where Natives do fully as well as Europeans; in fact, I doubt whether any European could have done as well there as Baboo Kalee Narain Roy has done. Without, therefore, relinquishing my old plea in favor of allowing Natives as large a share as possible in the administration of the country, I think it must be conceded, that there are certain classes of posts, entailing a certain description of duties, and requiring particular qualifications, for which, owing to differences in the national character, and habits of mind and body, Natives are much less qualified than are Europeans obtainable for the same salaries; just as, owing to these same differences, there are other posts for which Natives are much better qualified.

MEN.

Depressed condition.

148. The depressed condition of the over-worked, underpaid men of our establishment is the subject of earnest representation throughout the Line. I have said nothing yet about the proposed general increase of pay, because I confidently hope that its concession will not be delayed. I shall only now add, that the additional experience, gained since my proposals were submitted, has only strengthened my conviction that this increase is an absolute necessity; and that if I erred anywhere, it was in not asking for more than I have done, in one or two cases, and that every reduction made in my proposals will entail four-fold loss upon the State. I am aware of the responsibility I take in asserting this; I grudge the unnecessary expenditure of a Rupee as much as any one; but this is the fact, and I am bound to state it.

Vital necessity of conceding the proposed increase of salary.

Rule in regard to the concession of seizure proceeds requires modification.

149. The concession of the whole proceeds of smuggled salt to the captors has, more than any other thing, contributed to render the administration of the Line, on present salaries, possible. It has been gratefully recognized by the men as a boon, and has unquestionably stimulated to extra exertion. It requires a slight modification. As the rule stands, the men, in *every* case, have a *right* to the full seizure proceeds. Cases have occurred in which there has been reason to think, that, content with getting the salt, the men have wilfully allowed the smugglers to escape. To the existing rule, the proviso should be added, that in cases where the Collector has reason to be dissatisfied with the conduct of the persons concerned, he may, with the sanction of the Commissioner, or Deputy Commissioner (according to which is at the time immediately in charge of the division), credit part, or the whole, of such proceeds to Government. It would not do, as some officers have suggested, to restrict this boon to cases where smugglers have actually been captured, because, in the first place, in dark nights, and over bad ground, a single man's utmost exertions may be insufficient to enable him to capture any of a party of smugglers,* although he may make

* Especially where, as in Saugor, the smugglers freely use stones and slings.

them drop their salt; and in the second, it would, in case of the unavoidable escape of the smugglers, be offering a temptation to pounce on some unlucky stranger passing, and produce him as the required smuggler. I do not say such would happen, or that even if it did, it would deceive either the man's own officers, or the Courts; but it *might* do so, and it is wholly unnecessary to put this temptation in our men's way. All that is required is, a power vested in the superior officers of the department, to withhold this boon, when the parties concerned appear, from any cause, undeserving of it.

Concession to jemadars sick in hospital of the same privilege accorded to peons.

150. Our jemadars are just as much exposed as the men, and are just as often incapacitated by sickness from performing their duties. Ours is not a service where a man can cease work for a day without substitutes being appointed, and I therefore solicit, that in the case of jemadars, as in that of peons, a compassionate allowance of Rs. 5 a month be granted to them when in hospital for a period not exceeding six months, in all cases in which their sickness has not been the result of drunkenness, debauchery, and the like.

Our special thanks due to certain authorities for their support and assistance during the year.

151. Although, as a rule, we are indebted for much kindly courtesy and support to the Revenue and District Authorities, whose jurisdictions our Line traverses, I cannot properly conclude this report without tendering my especial thanks to Colonel Balmain, Commissioner of Chutteesgurh, Mr. A. C. Lyall, now Commissioner of West Berar, and Lieutenant Colonel Dwyer, late Deputy Commissioner of Sirsa, for the valuable assistance that, on several occasions, we have, during the past year, met with at their hands. The interests of the State, as well as the welfare of the people, demand the most perfect and cordial understanding between the heads of this Department and the various District and Divisional Authorities, within whose jurisdiction our establishments are posted; and where these latter authorities go out of their way and put themselves to trouble (that we have perhaps no right to expect), to secure this, and facilitate our labors, public and grateful acknowledgment cannot properly be withheld.

Incompleteness and bulkiness of this report, to be regretted, but unavoidable.

152. It only remains for me to apologize for the incompleteness, and notwithstanding this, excessive length of this report. I only took charge of this department in July. From the 1st of October 1867 to the 13th May 1868, I was ceaselessly moving about, in such a manner as to render the carrying on of even my current work no easy task. I have had, myself, to collect nearly the whole of the materials of this report; and though there are important subjects on which I have been unable to afford information, this has been due to the impossibility of proceeding myself to enquire into matters on the spot. Hereafter, my collectors and other subordinates will realize better what is required of them, and will be able to do much *for* me, that I have, this year, unavoidably had to do for *myself*. As regards its bulkiness, writing against time, the report having been long overdue when I returned from Rajpootana, I have been unable to systematize and compress, as I ought to, and with a little more leisure should, have certainly done.

ALLAN HUME,

Commissioner of Imperial Customs.

P. S.—Realizations on the Berar Line not being credited to the Imperial treasury, I have not alluded to the Berar Line in the above General Review; it will be found separately treated of in a separate Sectional Review, Appendix IV.

The following are the matters most urgently requiring the consideration and orders of Superior Authorities:—

1.	Correction of erroneous system of crediting receipts ...	Paras. 64, 65.
2.	Admission of salt on half duty, to be restricted to despatches protected by passes from the authority who may have realized the other half of the duty. Such authority, on the return by us of such passes, to credit us, by transfer, with the amount of duty realized by them	Para. 58, and C. P.'s Sectl. Rev., paras. 9, 10, 11.
3.	The Raipore Line to be strengthened	Para. 131, and C. P.'s Sectl. Rev., paras. 42, 126, 128.
4.	Imperial Line to be continued to the sea, from the terminus of the Raipore Division	Paras. 11, 132, and C. P.'s Sectl. Rev., paras. 13, 28, 29.
5.	Measures to be adopted to control the illicit manufacture of salt, in Behar	Paras. 20 (and note) and 134.
6.	Measures to be adopted to control the illicit manufacture of salt in the Punjab	Paras. 18 (and note) and 133.
7.	Officers to be deputed to enquire into the nature and extent of the manufacture in Rewah and Rampore	Paras. 15, 16, 135.
8.	The duty-free passage of sugar down the Chenab and Indus to be prevented	Para. 47.
9.	Raw sugars to be taxed throughout the Central Provinces, as elsewhere	Para. 89, and C. P.'s Sectl. Rev., para. 19.
10.	Railway to be constructed from Sooltanpore to Delhie ...	Para. 96.
11.	Railway to be constructed from Pindadun Khan to Lahore	Para. 95.
12.	Officers of the Department to be supplied with certain books and papers, and a Departmental Gazette to be published	Paras. 145, 146.
13.	Compassionate allowance to be granted to Jemadars, sick in Hospital	Para. 150.

BIS DAT QUI CITO DAT.

Appendix T.

Review of the Administration of the Punjab Section of the Imperial Customs' Line for the official year 1867-68.

PUNJAB SECTION. IMPERIAL LINE.

Its course.

THE Punjab Section of the Imperial Line commences on the Sutledge, seven miles west of Fazilka in the Sirsa District, and running through this latter, the Hissar, Rohtuk, a corner of the Delhi and Goorgaon Districts, terminates some six miles east of Hodul on the borders of the Muttra District.

Length.

2. Its total length is 292 miles; it comprises three Divisions, Sirsa, Hansie and Delhi, the head quarters of whose Collectors are at the places which give their names to the divisions. Fifteen Patrols and ten Assistants are posted along the Line, and two other Assistant Patrols are respectively in charge of the two clusters of Salt Works, known as the Sooltanpore and Noh Mehals.

3. Separate detailed reviews of the administration of each division are annexed, and I shall here consequently only deal generally with provincial results.

FINANCIAL RESULTS.

GROSS REALIZATIONS

4. The gross realizations of the Punjab Section of the Imperial Line amounted, in 1867-68, to Rs. 51,37,684, being nearly 12½ per cent. in excess of those for the official year 1866-67, (11 months), and a trifle more than one per cent. below those for the corresponding 12 months of 1866-67. The following details for several consecutive twelve monthly periods will enable us to judge more satisfactorily of the past year's results:—

compared with those of corresponding twelve monthly periods.

YEAR.	Salt.	Sugar.	Miscellaneous.	TOTALS.
	Rs.	Rs.	Rs.	Rs.
1867-68	42,05,049	9,23,078	9,557	51,37,684
1866-67 (11 months)	38,34,424	7,26,903	6,679	45,68,006
Corresponding 12 months of 1866-67 ...	42,90,256	8,97,206	7,135	51,94,597
Ditto ditto of 1865-66 ...	34,43,556	9,04,350	6,921	43,54,827
Ditto ditto of 1864-65 ...	33,44,723	8,39,372	10,009	41,94,104

No useful comparison can be made with the period of 11 months comprised in the official year 1866-67, but from the above table it appears that as compared with the preceding 12 months, there has been a decrease in salt of Rs. 85,207, or nearly 2 per cent., and an increase in sugar of Rs. 25,872, or nearly 3 per cent.

Salt: *stimulating and depressing influences.*

5. The slight decrease in salt has been the final result of a variety of causes, local and general, some tending to stimulate and some to depress the trade. On the one hand scarcity of carriage in the Upper Punjab, the result of the demand for grain towards Sindh and of other causes which it is needless here to discuss, led to a less supply than usual of Lahoree salt being brought down *in rear* of the Line, thus opening a wider field for supplies brought *across* the Line. Again, the completion of the rail to Delhi is materially developing the Sambhur trade of the Punjab Section, thus tending yearly to increase the collections on this latter. On the other hand, scarcity and dearness of carriage, throughout the first three quarters of the year, due to the influx

of pilgrims to the Hurdwar fair, the subsequent outbreak of cholera and quarantine rules which it rendered necessary, the very abundant rains absorbing carts and cattle alike in agriculture, and later, in the conveyance of agricultural produce and other causes, checked the trade, which was further impeded both by the state of some of the more important lines of traffic, much injured by the unusual rainfall, and by unseasonable and heavy showers in almost every month of the year. Manufacture of Deedwana and Sooltanpooree, two of the principal descriptions of salt that cross the Punjab Section of the Line, was greatly impeded by these same abundant rainfalls, and prices rose in consequence, while various stimulating influences (elsewhere discussed), in the preceding year had led to this latter closing with unusually large stocks below, *i. e.* inside the Line.

Fluctuations in the realizations of the several divisions.

6. How far the collections of the several divisions were respectively affected by these and other special local causes will be seen from the subjoined table :—

YEAR.	Sirsa.	Hansie.	Delhi.	TOTAL.
	Rs.	Rs.	Rs.	Rs.
1867-68	21,576	15,44,360	26,39,113	42,05,049
Corresponding 12 months of 1866-67...	19,347	15,58,319	27,12,590	42,90,256
Ditto ditto of 1865-66...	14,068	15,25,194	19,04,294	34,43,556
Ditto ditto of 1864-65...	19,800	13,05,853	20,01,970	33,44,723

It will be observed that while Hansie remained almost stationary, Sirsa had a small increase, and Delhi a not very important decrease. The causes of these divisional fluctuations are discussed in the several Divisional Reviews.

Detail of the different descriptions of salts imported.

7. The following table gives the quantities of each of the more important descriptions of salt imported across the Punjab Section of the Line during 1867-68, and the three previous corresponding twelve monthly periods :—

YEAR.	Sambhur.	Salumbha.	Sooltanpooree.	Deedwana.	Miscellaneous.	TOTAL.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
1867-68 ...	2,67,655	1,00,377	7,19,000	3,04,291	10,360	14,01,683
Corresponding 12 months of 1866-67	2,62,887	61,774	7,81,255	3,08,725	15,442	14,30,085
Ditto of 1865-66 ...	2,26,725	29,883	5,58,483	3,21,928	10,833	11,47,852
Ditto of 1864-65 ...	1,58,804	38,483	5,90,869	3,14,995	11,756	11,14,908

In Sambhur and Sooltanpooree, the steady increase observable in the above sequence is due, in the main, to the increased facilities for transport afforded by the rail to Delhi ; the slight decrease in the past year in Sooltanpooree being the result of exhaustion of stocks, consequent on the extraordinarily enhanced sales of 1866-67, and of a singularly unfavorable and rainy season preventing an adequate replenishment. Salumbha, inferior as it is, has also shared in the stimulus afforded by railway communication, but owes its vast increase in the past year to the rise in price of Balumbha and Sooltanpooree, and the extreme shortness of the supply of the latter. Deedwana owes its average steadiness to various causes ; on the one hand a poor salt, sought for nowhere beyond the limits within which it has long formed the staple of consumption by the poorer classes, the advent of

the rail failed to improve its prospects; on the other hand, within those limits it forms, in the present state of our communications, the only cheap and fairly good salt available to the people, and is the most convenient return freight for grain and other important exports, and hence will probably for years hold its ground.

Sugar: *stimulating and depressing influences.*

8. In sugar the increase above noticed is the result of various conflicting causes: abundant supplies, the result both of a favorable agricultural season in the tracts of country whose produce usually crosses this section of the Line, as well as of railway communication, throwing into the Delhi market for the first time large supplies from the marts below Allahabad, coupled with the improved position of the Rajpootana agricultural population, until recently suffering from scarcity, ought to have given, and, in the Delhi Division, did give us a large increase; continued scarcity and dearness however of means of transport, unseasonable weather impeding traffic, and the yearly increasing diversion of the sugar trade towards the duty free Chenab route, (*vide* para. 47 General Review), and other special local causes, combined to counterbalance and nearly nullify the operation of these favorable influences.

Fluctuations in the realizations of the several divisions.

9. The variations in the sugar collections of the several divisions in the last four corresponding 12 monthly periods are shown in the following table :—

Year.	Sirsa.	Hansie.	Delhi.	Total.
	Rs.	Rs.	Rs.	Rs.
1867-68	81,668	2,79,699	5,61,711	9,23,078
Corresponding 12 months of 1866-67 ...	1,09,521	3,15,775	4,71,910	8,97,206
Ditto ditto of 1865-66 ...	96,734	2,83,472	5,24,144	9,04,350
Ditto ditto of 1864-65 ...	81,468	2,67,468	4,90,436	8,39,372

The various minor causes affecting the local trade of each division are discussed in the several Divisional Reviews. Suffice it to say generally that Delhi, as the depôt of rail-carried sugars, and to a great extent beyond the depressing influence of the diversion towards the Chenab, enjoyed a preponderance of favorable influences, while scarcity of carriage, high prices and the proximity of a free route,* more than counterbalanced, in the Sirsa and Hansie Divisions, those general causes which, during the past official year, might otherwise have been expected to increase, as elsewhere, the sugar revenue.

Proportions of refined and unrefined exported.

10. The proportions, in which refined and raw sugars respectively have contributed to our revenue in the past year and previous corresponding periods, are exhibited in the subjoined table :—

Year.	Refined.	Unrefined.	Total.
	Mds.	Mds.	Mds.
1867-68	5,99,351	8,63,273	14,62,624
Corresponding 12 months of 1866-67	5,37,437	9,86,053	15,23,490
Ditto ditto of 1865-66	5,55,450	9,30,392	14,85,842
Ditto ditto of 1864-65	5,09,781	8,78,900	13,88,681

* *Vide* paragraph 47, General Review.

It will be seen that it is in the refined article alone that there has been an increase; in raw sugar the decrease has been considerable, and this is exactly what might have been predicted. It is refined sugar chiefly that the rail brings up from eastern marts to swell our exports, while it is in the raw staple which relatively to its value requires most carriage and which is principally consumed by the poorer classes, that the scarcity of carriage and the poverty of the Rajpootana agriculturalists have most affected the trade.

Miscellaneous.

11. Variations in our miscellaneous items of revenue (fines and forfeitures for the most part, first credited as receipts and then charged as expenditure on distribution) are too trifling to need special notice.

CHARGES

12. The gross charges of the Punjab Section of the Imperial Line amounted for 1867-68 to Rs. 3,40,913, which may be contrasted as follows with the expenditure of preceding years:—

Year.	Fixed.	Contingent.	Petty constructions and repairs.	Total.
	Rs.	Rs.	Rs.	Rs.
1867-68	3,08,999	16,444	15,470	3,40,913
Corresponding 12 months of 1866-67 ...	3,04,368	16,085	1,218	3,21,671
Ditto ditto of 1865-66 ...	3,03,364	14,900	.....	3,18,264
Ditto ditto of 1864-65 ...	3,18,410	15,325	.....	3,33,735

The trivial variations in fixed and contingent charges will be noticed in the various Divisional Reviews; it will be here sufficient to remark that the large increase under the head of Petty Constructions, &c., is nominal and not real; expenditure for these purposes having heretofore been charged against the Department Public Works, and not, as now, debited in our accounts.

NET REVENUE.

13. The net revenue for 1867-68 amounted to Rs. 47,96,771, which I proceed to compare with that of preceding corresponding periods.

Year.	Gross Collections.	Charges.	Net Receipts.	Percentage of Charges on gross Collections.
	Rs.	Rs.	Rs.	
1867-68	51,37,684	3,40,913	47,96,771	6·6
Corresponding 12 months of 1866-67 ...	51,94,597	3,21,671	48,72,926	6·15
Ditto of 1865-66 ...	43,54,827	3,18,264	40,36,563	7·3
Ditto of 1864-65 ...	41,94,104	3,33,735	38,60,369	7·9

The comparatively low percentage of charges in this Section is due partly to no portion of the Head Quarter Establishment being charged against it, and partly of course to its bearing no portion of the cost of the Internal Department on which its revenue so greatly depends. As already noticed (paras. 56-58 General Review), no useful conclusions can be deduced from a consideration of the proportion of cost to collections in individual sections of what is in reality a single department, all the divisions and branches of which are mutually dependent on, and more or less indebted for their results to each other. It is necessary moreover to bear in mind that owing to

the system of accounts heretofore prevailing in the department, whereby duty is taken credit for wherever it is *paid* without reference to where the goods actually cross the Line, the Delhi realizations, and consequently those of the whole Punjab Section, are made to appear somewhat larger than they really are, at the expense of the Muttra Division and the North-Western Provinces' Section. This matter has already been discussed in paragraphs 64, 65 of the General Review, and needs no further mention here.

COURSE OF TRADE.
SALT.

14. Sambhur, the favorite salt of the mass of the Hindoos, only crosses the Punjab Line in the Delhi and the eastern extremity of the Hansie Divisions. Westward of this, the wealthier classes who alone could afford to consume it, prefer the produce of the Pindadun Khan mines, commonly known as Lahoree Salt. From Delhi, Sambhur finds its way across the Doab to Rohilcund and *viâ* Shajehanpore and Furruckabad into Oudh, while the rail distributes it along its whole course as low down at any rate as Benares. Deedwana, an inferior article, the food, as a rule, of the poorer classes, only crosses in considerable amounts that portion of the Line in the Hansie Division to which its source is nearest; a little it is true crosses the eastern portion of the Sirsa and western limb of the Delhi Divisions, but more than 14-15ths of the total imports pertain to Hansie. The poorer classes, of the sparse population in rear of the Sirsa Line, draw their scant supplies from the Phullowdee Salt Works in Jodhpore, which are comparatively near to them, and supplement these with inferior earth salts from Bikaneer and Bhawulpore. These latter are generically known as kharee, but they must not be confounded with the "*kharee non*," or sulphate of soda, of the North-Western Provinces and Punjab, although containing a considerable proportion of this. In past times the large Sepoy Cantonments in the Punjab consumed a good deal of the beautiful salt made at Puchbuddra, and this used to come up *viâ* Sirsa as a return freight for camels that had taken a variety of up-country produce and manufactures to Jodhpore, from which the works are distant only about 28 miles. The mutiny and dispersion of the Hindoostanees greatly diminished the demand, while trade, in Cabool fruits and the like, seems to have taken another channel, so that year by year the import of this choice description of salt grows less and less. Salumbha and the inferior qualities of Sooltanpooree salt supply largely the poorer classes in rear of the Delhi Line; the latter crowding through the central posts, the former finding outlets towards the eastern terminus. The better qualities of Sooltanpooree mostly pass on to Delhi itself, and are thence exported as widely as Sambhur.

Manufacture at Sooltanpore and Noh.

15. Some mention appears here necessary of the two groups of salt works, known as the Sooltanpore and Noh Mehals, which, situated near the Line in British territory, opposite the Gurhee Hursroo and Sylanee posts respectively of the Delhi Division, are under our immediate supervision. At both of these localities, despite certain obstacles, the manufacture is progressing. Of Sooltanpore the trade is being greatly improved by facilities afforded by the rail, and when the Hakimee Tax, now often oppressively and vexatiously exacted by the contractors, ceases (as at the close of next year, it is hoped that it will), to be farmed out, and the communications between Delhi and the works are improved (*vide* paragraph 91, General Review), there is no doubt that these latter will rise into great importance and turn out something like 50,000 tons a year of very fair salt. During the past year the actual out-turn, though considerably in excess of all other

previous years, was a good deal less than that of 1866-67, but this was solely due to the unfavorable season, there having been in 1867-68 an increase of some 9 per cent. in the number of pans as compared with the previous year. At Noh a temporary stimulus has been given to production by the exhaustion of the stores at Sooltanpore, but the salt is very inferior as a whole, owing to the greater quantity of lime present in the brine and to defective manufacture, and is not likely at present permanently to extend its area of distribution. Further particulars of these works will be given in the Divisional Review; I shall only here add that their average yearly outturn may at present be taken at 25,000 tons for Sooltanpore, and 6,000 tons for Noh.

SUGAR.

16. Of the sugar trade little has to be said; the bulk of the raw sugar crossing the Punjab section of the Line is the produce of the Mozuffernuggur and Saharunpore Districts, the khadir and canal lands west of the Jumna, the country about Nujjufgurh and the Sahibee, and the Jullundur Doab. Of the refined sugar also, a portion is derived from the same sources, but by far the major portions come from Rohilcund and the marts east of Allahabad.

SMUGGLING.

17. Taken as a whole, I believe it may be fairly asserted that smuggling has been greatly kept in check during the past year in the Punjab section of the Line. In two localities alone, the Sahoowalla, Durbee and Jodka beats of the Sirsa Division, and the Awul beat of the Delhi Division, are there considerable smuggling communities, in the former of Raths, in the latter of Ranghurs. The former, some successful prosecutions and the uniform and cordial support of Colonel Dwyer, Officiating Deputy Commissioner of Sirsa, have completely cowed for the time, while the latter, the departmental officers have succeeded, though not without difficulty, in holding in check. There is, I think, a tendency to punish somewhat too leniently offenders convicted of a breach of Customs laws. This is, it seems to me, to be regretted. On our part by releasing on payment of double or single duty all cases in which there is the slightest reason to believe the transgression to have been the result of ignorance, we do our utmost to prevent any but wilful and deliberate violations of the law becoming the subject of prosecutions. *Per contra*, we have I think a right to expect that when such deliberate violations of the law are substantiated in our Courts, these latter will inflict such punishments as may serve to deter other persons from similar mal-practices and not content themselves with awarding nominal penalties. It is quite as much in the interest of the people themselves as out of regard for that of the State, that I venture to press this subject on the notice of the Punjab Government. In some districts, the excessive leniency *encourages* smuggling, and multiplies indefinitely the number of cases in which we are compelled to prosecute. Of 49 persons prosecuted, convicted, and fined in the Delhi Division, scarcely *one* was, I believe, sentenced to a fine of even Rs. 10, and the average was less than Rs. 7. Had the first dozen of these cases been dealt with as they would have been in the Sirsa Division, smart fines inflicted, and in default of payment, imprisonment for three months, we should have heard nothing of the majority of the remaining 37 cases.

Action of the Courts.

PENAL ACTION OF THE DEPT.

Persons.

18. In the General Review I have noticed the great importance which I attach to a correct realization of the extent and nature of the penal action of the department, and I now proceed to give certain important details in regard to this action in the Punjab.

OF THE IMPERIAL CUSTOMS LINE FOR THE OFFICIAL YEAR 1867-68.

Return of smugglers captured, released, and prosecuted.

Divisions.	Total number of smugglers captured.		Number released by Department.		Number prosecuted.		Number acquitted by the Courts.		Number convicted.		Percentage of convictions on prosecutions.	
	1866-67.	1867-68.	1866-67.	1867-68.	1866-67.	1867-68.	1866-67.	1867-68.	1866-67.	1867-68.	1866-67.	1867-68.
Sirsa	25	9	...	..	25	9	11	2	14	7	56	77·8
Hansie	18	10	1	...	17	10	2	1	15	9	88·23	90·
Delhi	79	97	5	28	74	69	10	7	64	62	86·5	89·8
Total for Punjab	122	116	6	28	116	88	23	10	93	78	80·27	89·63

Every person, in regard to whom a voluntary breach of the law did not appear manifest, was released on payment of double or single duty, as the case might be; and, as will be seen, the percentage of convictions to prosecutions reached to nearly 90 against little above 80 in the preceding year.

19. Turn now to the result of these convictions. In Sirsa 7 underwent imprisonment for terms above 3 months; in Hansie 9 underwent like sentences; in Delhi 49 paid fines averaging Rs. 6-8 each, and 13 were imprisoned, *viz.*, 2 for above 2 months, 9 for above 1 month, 2 for above 15 days. Such is the aggregate of punishments, affecting altogether 78 persons, inflicted *by the Courts* in enforcing in the Punjab those Customs regulations that resulted in the realization of a net revenue of 48 lakhs of Rupees, exclusive of the share they undoubtedly had in rendering possible a realization of 36 lakhs more at the mines.

20. Besides, however, Court prosecutions and punishments, the department also caused the confiscation of about 600 maunds of smuggled salt and sugar (chiefly the former) valued at about Rs. 950 and the levy of double duty amounting to Rs. 2,890; such confiscations and levies of double duties only take effect with the sanction of Commissioners of Revenue, and it is satisfactory to find that out of 1,102 applications for such penal measures, sanction was withheld only in *one* single case! Goods.

21. Very considerable improvement has been effected during the year in the dry hedge. Throughout the Delhi and Hansie and the eastern one-third of the Sirsa Division, the dry hedge may be said to be in excellent order, presenting everywhere a thorny barrier from 7 to 10 feet high and from 5 to 8 feet thick. In the western two-thirds of the Sirsa Division, the dry hedge, though much improved since my inspection, is in indifferent condition; the scarcity of material, the small number of our men, and the violence of the sand storms which carry away a mile of the hedge at a time partly account for this, but at the same time the dry hedge here *is* susceptible of improvement, and this *must* be effected. Of the green hedge, my report must be even less favorable. In about two-thirds of the Delhi and one-third of the Hansie Division, it is in a thoroughly satisfactory condition. Throughout the rest of the Punjab Section, the live hedge as such is wanting. True, there is no single spot where year after year seed has not been sown, and the young plants more or less carefully tended, but hitherto frost, sand, rats, and want of water have prevented any regular and sufficient growth. Everywhere straggling survivors of the sowings from 1 to 10 years old prove that yearly the attempt has been made, but a regular close thick HEDGE

hedge, in fact a barrier of any practical value, has not hitherto been attained. All schemes hitherto propounded for securing this desideratum have involved very heavy expenditure, which I am at present unwilling to recommend; it may come to this later, but at present a variety of experiments are being tried, and my belief is, that without any very great expense I shall be able to get up a good live hedge in two-thirds of the Punjab Section, and that in the remaining one-third the live hedge must be dispensed with, until some canal is brought down somewhere near Sirsa, and a couple of Rajbuhas laid out for us so as to furnish a supply of sweet water for the young plants. At present water is 100 feet below the surface in many places, and when reached, is so brackish that it destroys young trees watered with it.

COMMUNICATIONS.

22. The provision of improved facilities of communication between Delhi and the Sooltanpore Works has already been advocated (General Review, para. 86) and need not here be further discussed; but it is necessary to call attention to the fact that 2½ miles of the metalled Furrucknuggur and Gurhee Hursroo road still remain unfinished. This has been in some degree owing to the quarrels between the contractors and the refusal of the Sadrana zemindars to allow kunker to be dug except on extravagant terms, but it is also partly due to the authoritative stoppage of the works by the Department Public Works on the 7th August 1866 for nine months and again in the current year. It is sincerely to be hoped that permission to resume work will speedily be accorded. Poor a substitute as this line is for the tram road or light line of rails that we so urgently need, it is yet a *vast* assistance to trade, and the non-completion of this last worst section is *seriously to be deplored.* As regards other trading lines leading to and from the Line, I am compelled to say that in my humble judgment, especially in the Delhi Division, they have scarcely received sufficient attention from the district authorities. The past however need not now be further dwelt upon; for the future, as noticed in the General Review, I propose to submit annually before the close of the rainy season a list of those roads which in the interests of the department I consider it most necessary should receive special attention from the local authorities, and it will then rest with the Government to issue such orders in each case as may be deemed expedient.

OFFICERS.

23. Of the officers attached to the Punjab Section, I would specially notice Mr. W. W. Wright and Mr. W. Blewitt amongst the Collectors, and Messrs. Bowles, Rich, Synnott and F. R. Blewitt amongst the Patrols. Other officers have been favorably noticed in the Divisional Reviews, but the above are those who on the whole have done the best. I proceed now to review separately the administration of each of the divisions contained in the Punjab Section.

SIRSA DIVISION.

SIRSA DIVISION.
Line:

24. The Sirsa Division, the first of the ten comprised in the Imperial Line, commences on the Sutledge seven miles west of Fazilka in the Sirsa District, and terminates eight miles east of Bhuttoo in the Hissar District.

its course.

25. It runs through Fazilka, Urneewala, Malout, Lumbee, Dubwalee, Odhan, Sahoowala, Durbee, Jodhka and Bhuttoo, at each of which an officer is posted, and is 126 miles in length.

OF THE IMPERIAL CUSTOMS LINE FOR THE OFFICIAL YEAR 1867-68.

FINANCIAL RESULTS.
GROSS REALIZATIONS.

26. The gross receipts of this division amounted in 1867-68 to Rs. 1,05,164, which, as will be seen from the subjoined details, was a fair average year's collection, although considerably below the amount realized in the immediately preceding twelve months.

Compared with those of previous corresponding 12 months.

Year.	Salt.	Sugar.	Miscellaneous.	Total.
	Rs.	Rs.	Rs.	Rs.
1867-68	21,576	81,668	1,920	1,05,164
Corresponding 12 months of 1866-67 ...	19,347	1,09,521	1,294	1,30,162
Ditto ditto 1865-66 ...	14,068	96,734	1,353	1,12,155
Ditto ditto 1864-65 ...	19,800	81,468	2,559	1,03,827

Except in sugar the fluctuations have not of late years been of any importance; although relatively to the small revenue of the division, they have been considerable.

Salt.

27. To begin with salt, an increase of 10 per cent. in the salt duties as compared with those of the previous 12 months (itself even in this division a successful year), is observable. This increase is partly due to special local causes to be noticed hereafter, and partly to the general one of less Lahoree salt having come down in rear of our Line. This again is said to have been, in a great measure, the result of a scarcity of available carriage in the upper portion of the Punjab, owing to the briskness of the Kurrachee grain trade.

Detail of kinds imported.

28. Only four descriptions of salt now cross in this division. The amounts of each imported during the past official year and previous corresponding 12 monthly periods were as follow :—

Year.	Balumbha.	Deedwana.	Phullowdee.	Kharee.	Puchbuddra.	Total.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
1867-68 ...	...	1,124	4,277	1,715	76	7,192
1866-67 ...	...	311	3,846	1,971	321	6,449
1865-66 ...	...	33	2,744	1,887	25	4,689
1864-65... ...	304	6	2,600	2,405	1,285	6,600

Causes of fluctuations in the import of each.

29. This division is quite out of the track of Balumbha salt, and only an occasional despatch crosses here once in a series of years as return freight. The import of Deedwana (a salt noticed in the General Review, paragraph 81) has very greatly increased in this division during the past year. This is a mere temporary rise due to purely local causes. There was something very like a famine in Shekhawattee during part of 1867-68, and numbers of people came up thence to Sirsa, &c., for grain, bringing in exchange for it the almost only valuable commodity (Deedwana salt) procurable any where in their neighbourhood. Moreover, the gradual decrease in Kharee, due to its inferior and scarcely edible character and in Puchbuddra owing, it is said, to a change in the line of trade which formerly brought up this latter as return freight, is naturally tending to increase the consumption of both Deedwana and Phullowdee salts. The Kharee salt, I may note, imported in this division, is not what is usually termed Kharee Non, *viz.*, Glauber salts or sulphate of soda, more or less impure. The specimens of it which I examined on tour were a

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very impure common salt yielding from 50 to 80 per cent. chloride of sodium and manufactured in Bhawulpoor and Bickaneer. Some of it was said to be used in curing hides, but if so, it must vary very much in character, as no sample that I met with contained less than half pure salt, a proportion rendering it totally useless for such purposes.

30. It would be unjust to omit, that a portion of the increase of the salt imports is doubtless due to the success attending the prosecution of certain well known smugglers who had seriously maltreated certain of the establishment for opposing their passage of the Line; as also to the uniform and cordial support which the department has throughout met with from Colonel Dwyer, the late Officiating Deputy Commissioner, to whom our best thanks are due.

Sugar.

Export of refined and unrefined compared with that of past years.

31. In sugar, on the other hand, there has been a heavy decrease in both the refined and unrefined article. The details as compared with those of former corresponding periods are as follow :—

Year.	Refined.	Unrefined.	Total.
	Mds.	Mds.	Mds.
1867-68	36,447	1,20,592	1,57,039
1866-67	42,346	1,79,136	2,21,482
1865-66	43,285	1,42,528	1,85,813
1864-65	30,394	1,36,200	1,66,594

Causes of decrease local.

32. The great demand for carriage, owing to the flow of grain towards the Kurrachee market, which diminished the supply of Lahoree salt in rear of this division, simultaneously diminished the supply of sugar that crossed it; much carriage too was earlier in the year absorbed by pilgrims to the Hurdwar Koomb-ka-Mela, and this also had its effect. Up to the beginning of the cold season, moreover, prices were high, and till some time after the rains most of the Rajpootana consumers were in no position to indulge in luxuries. Hence the decrease was necessarily most conspicuous in the staple (unrefined) that relatively to its value required most carriage, and of which the poorer classes were the principal purchasers. These are temporary causes, and to these the present decrease is chiefly attributable; but the gap in the Line, due to leaving the Chenab open to the export of sugar, is gradually and certainly checking the trade of Fazilka and Sirsa by marring its development. I have already noticed this matter in the General Review (paragraph 47), and shall only add here that unless revised arrangements be speedily made, the export trade of this division must never be expected to participate in that general improvement going on every where around it.

Miscellaneous.

33. The miscellaneous receipts, fines, forfeitures, &c., seem to call for no special notice.

CHARGES.

34. The charges for this division appear most extravagant when compared with its realizations, amounting to over 88 per cent. of the latter; it is not, however, by comparing the charges and revenue of any single division, as I have already pointed out (paragraph 56, General Review), that any useful results can be obtained. This division is only a part of the whole, and were it abolished, divisions that now yield an enormous revenue and

exhibit less than 5 per cent. as their proportion of expenditure to income would at once sink into insignificance. In reality the expenditure has been reduced to the lowest possible limit, compatible with reasonable efficiency, and the Local Officers are urgent for the creation of half mile posts in two or three of the worst beats, a measure doubtless desirable, but for which I am not at present inclined to press.

Not susceptible of reduction.

35. The apparent excess of Rs. 3,000 in the charges of the past official year as compared with those of preceding corresponding periods is due solely, as will be seen from the subjoined detail, to the inclusion in our accounts for the first time of expenditure on account of petty constructions, repairs, &c., formerly accounted for in the Public Works Department.

Excess as compared with previous years merely nominal.

Details for past and previous years.

Year.	Fixed charges.	Contingencies.	Petty constructions and repairs of buildings.	Total.
	Rs.	Rs.	Rs.	Rs.
1867-68	86,803	3,237	2,976	93,016
1866-67	86,743	2,985	...	89,728
1865-66	86,712	2,841	...	89,553
1864-65	91,294	2,845	...	94,139

NET REVENUE.

36. The net income for the division was only Rs. 12,148, a sum totally insignificant when compared with the labor that it cost to realize it; but Sirsa is essentially a preventive division, and its Imperial value cannot be measured by its own financial results.

COURSE OF TRADE.

37. There is little to notice as to the course of trade in this division except to point out that the salt trade here supplies no distant mart and no wealthy population; a poor people more or less in the immediate proximity of the Line are the consumers. Sambhur never finds its way up here; the salt of the rich, those who *could* here consume it, prefer Lahoree. As for the Kharee it passes only on the western portion of the Line; it is as far as I have seen a wretched article unfit for either food or curing leather, but I have heard that below Line the purchasers subject it to some further process by which the chlorides and sulphates are separated, and both products utilized.

SMUGGLING.

38. The Sirsa Division has always been a troublesome one where smuggling is concerned, and the slightest relaxation invariably results in organized gangs breaking the Line. Like the Ranghurs near Awul in the Delhi Division, the Raths of Ding and other places in the Durbee, Sahoowala and Jodhka beats make a profession of smuggling and at times succeed in regularly cowing the establishment. Towards the close of 1866-67 several cases of forcible passage of smugglers occurred, but, in the latest and most serious one, the offenders were brought to justice and sentenced to long terms of imprisonment, for opposing and voluntarily causing grievous hurt to public servants in the discharge of their duty. The effect thus produced was striking, and I am happy to say that my own enquiries on the spot convinced me that, as the Collector believes, the passage of salt across the Line without paying duty has almost been put a stop to. The only fault I have to find is that while most of the attempts to smuggle have been defeated and the salt seized, too many of the smugglers have escaped capture.

PENAL ACTION OF THE DEPARTMENT.

39. In the Sirsa Division the penal action of the department has been very limited. Altogether nine smugglers were seized who were thus disposed of:—

Persons.

Released by Department.	Acquitted by Courts.	Convicted by Courts.	Detail of persons convicted.	
			Paid fines.	Underwent imprisonment.
...	2	7	...	7

Goods.

One hundred and seventy-nine maunds of goods valued at about Rs. 250 were confiscated, and double duty to the extent of Rs. 379 was levied. Confiscations and double duty levies require the sanction of the Revenue Commissioner, and it is satisfactory to find that out of 136 recommendations for such punitive measures made by the department in this division, the Revenue Commissioner concurred in every one.

HEDGE.

40. Of the hedge in this division little can be said. Except in a portion of Nizamoodeen Khan's beat (Urneewala), there is no green hedge deserving the name. Everywhere there may be seen early in the cold weather a line of flourishing seedlings, but these are mostly killed by frost or dried up by the hot winds, and I came, after a careful personal inspection, to the conclusion that without a much larger expenditure than the object in view seemed to warrant in *this* division, no really good green hedge was to be hoped for throughout. There *are* places where success seems probable, and there exertions are being made. The dry hedge in the Bhuttoo beat (Mr. Neil's) is superb, an impenetrable barrier 8 to 9 feet high. In Jodhka it is fair, in the rest of the division it is not so good as it ought to be. There are great difficulties, in places; material is very scarce; constant supplies are required to repair damages due to dust storms and white ants; still more ought to have been done in past years than was done, and though some progress has been made I hear since my visit, I hope next year to be able to give a more favorable report.

OFFICERS.

41. The Collector Mr. Parsons has not been long enough in the division to do all that is there required, and he has moreover been absent for three months on deputation to Muttra. I believe him to be a very good and able officer, and I doubt not that by the close of next year the division will clearly show improved results.

42. Mr. W. H. Bowles, Patrol of Sahoowala, who was officiating as Collector when the year closed, is a most estimable, and, so far as Line work is concerned, conspicuously efficient officer, but he seems scarcely up to the work of a Collector, and the annual report submitted by him is meagre and unsatisfactory. Nizamoodeen Khan, Patrol of Urneewala, a Native gentleman of tried loyalty and known integrity, also merits special mention. He is unquestionably the best Native officer in the department, and like Mr. Bowles as thoroughly enjoys the confidence of the district officers as he does of his own superiors. The only other officer whom I shall mention is Mr. Neil, Assistant Patrol, Bhuttoo, who has earned this notice, by the great care that he has bestowed on his dry hedge which, at the time of my inspection, was not only the best in the Sirsa Division, but also the best in the whole upper half of the Line.

OF THE IMPERIAL CUSTOMS LINE FOR THE OFFICIAL YEAR 1867-68.

HANSIE DIVISION.

HANSIE DIVISION.
Line:

43. The Hansie Division, the second of the ten comprised in the Imperial Customs Line, commences about 8 miles to the west of the village of Ladwee in the Hissar District, and terminates some 4 miles east of Bussanah in the Rohtuk District.

its course.

44. It runs by Ladwee, Hissar, Hansie, Moondahul, Mehim, and Bussana, at each of which places we have an officer posted, and is altogether 69½ miles in length.

FINANCIAL RESULTS.
GROSS REALIZATIONS:

45. The gross receipts of the division for 1867-68 amounted to Rs 18,24,972, which, although about ½ a lakh or 2¾ per cent. below those of the preceding 12 months, must, with reference to the average of past years, be pronounced a satisfactory return. The subjoined table will make this apparent :—

compared with those of previous corresponding 12 monthly periods.

Year.	Salt.	Sugar.	Miscellaneous.	Total.
	Rs.	Rs.	Rs.	Rs.
1867-68...	15,44,360	2,79,699	913	18,24,972
Corresponding 12 months of 1866-67	15,58,319	3,15,775	1,834	18,75,928
Do. do. 1865-66 ..	15,25,194	2,83,472	754	18,09,420
Do. do. 1864-65 ...	13,05,853	2,67,468	1,859	15,75,180

From the above it appears that while from salt we realized almost the same as in the preceding year (the best the division has yet known), in sugar a fair average revenue was also obtained.

Salt.

Stimulating causes.

46. The decrease in the salt realizations are so trifling that no special reasons may seem requisite to explain a fluctuation not amounting to 1 per cent. in a trade of this description. Still it is necessary to observe that but for certain depressing influences there would certainly have been a considerable increase in this division. 1stly, because less Lahoree salt came down in rear of the division; 2ndly, because there was a great demand for Sambhur at Delhi duty on account of much of which is always paid in this division; and 3rdly, because traffic along the usual Shekhawattee route being very greatly impeded for a considerable portion of the year, by the impossibility of procuring supplies or forage, rather more than usual of the Sambhur traffic actually crossed the division. General depressing influences prevented the division from reaping the full advantage of the stimulus thus given. Almost throughout the year, carriage was very dear; first, there was the Hurdwar fair, then cholera broke out amongst the returning pilgrims, and this and the energetic quarantine rules enforced by the civil authorities of this division delayed the release of the carriage thus employed. Hardly had these rules relaxed before the rains commenced,—rains that between May and October registered 28 inches against only six in the corresponding period of the previous year. Of course no carriage could be spared *then*, agricultural operations and the transport of their results to appropriate marts absorbed most of the carts, cattle and even camels. Late in the year only, did much carriage become available, and then the absurd capitation tax rumour (paragraph 38, General Review) for a time grievously checked further imports. Moreover, the stimulating causes first noticed, though increasing the absorption in rear of this division, did not affect the imports as much as they would have done had not the year commenced with unusually large stocks below Line. These stocks were speculative investments brought in during the 6 inch rainfall

Depressing influences.

season when carriage, deprived of its accustomed occupation, was cheap beyond precedent, and roads were dry, hard and good. On the one hand, therefore, there was increased demand locally (on account of the shortness of the Lahore supply) and to the eastward, while, on the other, there were unusually large existing stocks and peculiar difficulties in the way of bringing in new ones. The result of these contending influences was a decrease, of less than 1 per cent., as compared with the realizations of by far the most prosperous year this division had ever known.

Details in maunds of every description of salt imported.

47. The salt trade of this division, as will be seen from the following detailed statement, is virtually confined to the import of Deedwana and Sambhur Salt. :—

Quantity of Salt of each kind imported across the Hansie Division in Maunds.

Year.	Sambhur.	Deedwana.	Black.	Phullowdee.	Sooltanporee.	Kharee.	Salumbha.	Rewaee.	Total.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
1867-68	1,96,738	3,02,089	4,216	4	11,684	5	23	28	5,14,787
Corresponding 12 months of 1866-67.	1,84,781	3,06,497	8,953	6	19,079	115	...	8	5,19,439
Do. do. 1865-66.	1,66,098	3,19,198	5,603	22	17,276	196	...	4	5,08,397
Do. do. 1864-65.	1,10,761	3,03,739	4,626	10	16,099	25	...	23	4,35,284

Fluctuations in imports explained.

48. From the above figures it will be obvious that while Deedwana has remained almost stationary, Sambhur has year by year steadily increased. Further, it is remarkable that throughout this past year, during heavy rains, and when carriage was scarce and dear to an unexampled degree, the import of Sambhur never fell off. Deedwana for a time hardly put in an appearance; but month by month the import of Sambhur was equal to, or in excess of that of the corresponding period of the preceding most favorable year. It is suggested that this increase and steadiness of demand is due in a great measure to the increased demand in the Doab, and further east, for this favorite staple, consequent on the facilities for transport from Delhi, afforded by the rail (which runs equally in all weathers), and, I believe, that this is the cause of the increase in past years, and the general steadiness of demand. At the same time it must be admitted that, during the past year, the scarcity in Shekawattee tended to throw more of the Sambhur trade than usual into the hands of the Bhewanee traders, who pay duty at Hansie, and probably more of the trade itself through the western portion of this division. Probably it was this that turned what might otherwise have been an insignificant into a pretty well marked increase. In a word, there has been, for the last three years, and in all probability will continue to be, a steady development in the Sambhur trade in the Hansie, Delhi, and Agra Divisions, owing to the facilities for transport afforded by the East Indian Railway. General depressing influences noticed in the General Review checked this development in this particular year, and would probably have resulted in leaving the Sambhur trade of Hansie and Delhi, much as they were during the preceding year, had not a special local cause turned more of the trade than usual into the hands of the Bhewanee dealers, who commonly pay duty at Hansie, and thus, as a final result, given us a decrease in Delhi and an increase in Hansie.

OF THE IMPERIAL CUSTOMS LINE FOR THE OFFICIAL YEAR 1867-68.

49. Deedwana has gained nothing by the rail; a salt of no peculiar merit, it is sought for nowhere beyond the limits where the poorer classes have for long been accustomed to consume it. Directly carriage becomes dear, it ceases to be a profitable investment, and the import as such declines; but it is, when carriage is available, the cheapest fairly good salt much of the population, immediately in rear of the Hansie Line, can procure, and it forms a convenient return freight for important exports, and thus although fluctuating greatly from month to month, the total imports of the year, as a whole, have hitherto varied little.

50. Sooltanpooree is the only other description shown as imported in this division to any extent, and, as a matter of fact, the *bonâ fide* import of this is trivial. By an anomalous system already noticed (paragraph 61, General Review), salt is recorded as imported where it pays the duty, and thus, though in reality no Sooltanpooree salt actually crossed the Hansie Line, 11,000 maunds, which paid duty at the Hansie Customs' House, but in reality crossed in the Delhi Line, are shown as imports of this division.

Sugar.

51. Turning now to the sugar collections we find (as in Sirsa) a considerable decrease, and as in Sirsa (and from similar causes) it is in the unrefined article that the decrease is most marked.

Detail of Sugar in Maunds exported across the Hansie Line.

Year.	Refined.	Unrefined.	Total.
	Mds.	Mds.	Mds.
1867-68	2,07,707	1,91,977	3,99,684
Corresponding 12 months of 1866-67 ...	2,30,824	2,53,199	4,84,023
Do. do. 1865-66 ...	2,17,592	1,75,675	3,93,267
Do. do. 1864-65 ...	1,99,509	1,81.212	3,80,721

Decrease in exports explained.

52. That notwithstanding the general causes which, (especially towards the close of the year) have operated, as noticed in the General Review, to stimulate the sugar trade, this division should exhibit a large decrease under this head is by no means surprising. In the first place no stimulus to the sugar trade will ever much benefit the Hansie or Sirsa Divisons (*vide* para. 47 General Review) so long as the Chenab route remains untaxed. In the second place special local causes have this year operated in this neighbourhood to keep exports low. Until well into the cold weather supplies were very short and prices exorbitantly high, and the Rajpootana purchasers, too, many of them destitute. How high prices rose may be judged by a comparison of the rates at which in better times not very long ago saccharine produce was selling in Hansie, and those which they were there fetching to within the last quarter of 1867-68.

Kind of Sugar.	Number of seers for the Rupee.	
	Formerly.	In 1867-68.
Refined	4	2½
Red	12	6
Goor	17	9

Carriage too, as noticed under the head of salt (46), remained excessively scarce and dear for three-fourths of the year; the weather for long was an obstacle to much traffic, and prices did not fall so soon at Hansie, as at Delhi and other places, wholly or partly supplied by eastern sugars. Hence the decrease in the revenue of this division.

Miscellaneous.

53. The miscellaneous items of income are too insignificant to need comment.

CHARGES

54. The charges of the Hansie Division amounted for 1867-68 to Rs. 88,446 and may be thus compared with those of preceding corresponding periods:—

Charges.

compared with those of previous corresponding periods.

Year.	Fixed.	Contingent.	Petty constructions and repairs.	Total.
	Rs.	Rs.	Rs.	Rs.
1867-68	81,953	3,327	3,166	88,446
Corresponding 12 months of 1866-67 ...	79,369	2,739	1,218	83,326
Do. do. 1865-66 ...	81,100	1,622	...	82,722
Do. do. 1864-65 ...	86,854	2,831	...	89,685

The increase observable in the fixed charges of the past year is chiefly nominal, Rs. 1,000 belonging to the former year having been paid in this. In contingent charges there is an increase in both 1866-67 and 1867-68 as compared with 1865-66, proceeds of seizures in each of the former having exceeded those in the latter by some Rs. 850, and being as usual debited as charges on distribution, swelled the total of these latter, and the further increase in 1867-68 as compared with its immediate predecessor is due to a charge of some Rs. 250 on account of the pay of peons sick in hospital, to an allowance of Rs. 850 for the live hedge, &c. In petty constructions the difference is solely due to these being now charged in our contingent bills instead of being, as formerly, chargeable to the Department Public Works.

NET REVENUE

55. The net receipts of the division for 1867-68 amounted to Rs. 17,36,526. This result may be thus contrasted with that of previous corresponding periods:—

compared with that of past years.

Year.	Gross collections.	Charges.	Net receipts.	Percentage of charges on collections.
	Rs.	Rs.	Rs.	
1867-68	18,24,972	88,446	17,36,526	4·8
Corresponding 12 months of 1866-67 ...	18,75,928	83,326	17,92,602	4·4
Do. do. of 1865-66 ...	18,09,420	82,722	17,26,698	4·5
Do. do. of 1864-65 ...	15,75,180	89,685	14,85,495	5·6

Percentage of costs on realizations.

56. The percentage of charges on cost of collection which is less than 5 per cent. contrasts strongly with that of the neighbouring division, Sirsa, where it is 88; but, as explained when noticing this latter, no useful result can be obtained by thus calculating the proportion of charges to realizations in any one division. Here is a case in point: remove the Sirsa Line, and Hansie would not pay its own expenses!

COURSE OF TRADE.
Salt.

57. The great salt mart above Line for Deedwana salt (which is the real staple of this division) is Balsamund. Bhewanie

is the Sambhur mart par excellence, but of the two lakhs of maunds of this salt on which the Bhewanie traders pay duty in the Hansie Custom House (and which consequently under the present erroneous system are recorded as imports of this division), little more than one-tenth actually crosses here. What little does cross the Hansie Line passes almost exclusively east of Moondahul. Sambhur salt practically does not come further west than this. All the well-to-do people within whose reach it would come west of Moondahul or Hansie, prefer Lahoree salt.

Sugar.

58. The refined sugar that is here exported is, I think, much of it, from Rohilcund, but the coarse sugars are almost exclusively from the canal and khadir lands west of the Jumna.

SMUGGLING.

59. Smuggling in this division has been kept within narrow limits during the past year. Petty smuggling will never be, even here, entirely suppressed, but it may be prevented from ever materially affecting our revenue with comparatively few punitive measures.

PENAL ACTION OF THE DEPARTMENT.

Persons.

Goods.

60. The penal action of the department here has been very moderate; only ten smugglers were arrested (this was perhaps somewhat fewer than should have been seized), of which the Courts convicted nine. Of these eight underwent one months' and one 15 days' imprisonment. About 95 maunds of salt (worth perhaps Rs. 150) were confiscated, and double duty to the extent of Rs. 60 was levied.

Of 169 recommendations for confiscation and double duty submitted by the Collector of this Division to the Revenue Commissioner, 168 were approved by that authority and one was modified.

HEDGE.

61. Throughout this division the dry hedge is in *good* condition, in places it may be still susceptible of some little improvement; but it is unquestionably at the present moment in a far better condition than it has ever been, and we may trust the Collector to give us next year as perfect a fence as can be required. The green hedge is progressing; in perhaps one-third of the division it is good or likely to become so shortly. In the rest of the division frost, drought, white ants and jerboa rats have hitherto prevented the young plants of the yearly sowings from being properly reared. Various experiments have been tried, and an experimental mile where the ground was first deeply trenched and good earth substituted for seed has thus far proved a success; several miles more will be similarly dealt with in the current year, and if these too succeed we shall, in a few years, have a green hedge throughout the division, a thing until recently altogether despaired of.

OFFICERS.

62. The Collector Mr. W. Blewitt is one of the ablest officers on the Line. His annual report is very creditable to him, and his whole administration has been in every respect satisfactory.

Of the subordinate officers, Mr. Rich deserves special mention; a gentleman of high character and great experience; I wished to secure his services as an Officiating Collector, but he was unwilling (as he contemplates retiring before long) to assume the responsibilities of any new office, and therefore, of his own choice, continues, with equal credit to himself and advantage to us, to fill the post of Patrol of Hansie. Mr. LeFevre, Patrol of Mehim, is also, I believe, a very good officer; a portion of his green hedge shows what can be done where the soil is favorable, and an officer really exerts himself. I cannot say much of his annual report which is meagre in the extreme, but in every other respect he has given me entire satisfaction.

DELHI DIVISION.

DELHI DIVISION.

63. The Delhi Division, the third of the ten comprised in the Imperial Customs Line, commences about $2\frac{1}{2}$ miles west of Awul in the Rohtuk District, and traversing portions of this latter, the Delhi and Rohtuk Districts, terminates about six miles east of Hodul on the borders of the Muttra District.

its course.

64. It runs through Awul, Beree, Jhujjur, Badlee, Dhasa, Gurhee Hursroo, Boondsie, Sylanee, Pulwul, Bamnikhera and Hodul, and it includes the two groups of salt works known as the Sooltanpore and Noh Mehals situated from two to seven miles above Line. Its total length is $96\frac{1}{2}$ miles.

FINANCIAL RESULTS.

GROSS REALIZATIONS

65. The gross receipts of this division for 1867-68 amounted to Rs. 32,07,548, a sum somewhat in excess of those of the immediately preceding 12 months, a period of unexampled prosperity, where both this division and the Line as a whole were concerned. How the realizations under each head stand as compared with those of previous corresponding 12 monthly periods is shown in the following table:—

compared with those of corresponding 12 monthly periods.

YEAR.	Salt.	Sugar.	Miscellaneous.	TOTAL.
	Rs.	Rs.	Rs.	Rs.
1867-68	26,39,113	5,61,711	6,724	32,07,548
Corresponding 12 months of 1866-67	27,12,590	4,71,910	4,007	31,88,507
Do. do. 1865-66 ...	19,04,294	5,24,144	4,814	24,33,252
Do. do. 1864-65 ...	20,19,070	4,90,436	5,591	25,15,097

Thus it appears that while as regards salt there has been a decrease of some Rs. 73,000, there has under the head of sugar been an increase of Rs. 90,000.

Salt.

66. The enormous increase observable in salt as compared with 1864-65 and 1865-66 is in a great measure the result of the increased facilities for trade afforded by the opening of the rail to Delhi. The decrease of less than 3 per cent. in the collections of 1867-68 as compared with those of the preceding corresponding 12 months hardly shows the extent of our loss. But for special depressing causes we ought to have had a considerable increase here. The Railway is steadily developing the salt trade of Delhi,* and this latter had by no means reached its maximum in 1866-67. The rise in prices in Balumbha was certain to stimulate the trade in the salts that pass through Delhi. Unfortunately several causes combined to counterbalance this stimulus and check the development of trade by rail. In the first place cheap carriage and a dry season had led during 1866-67 to very considerable stocks being accummulated below Line, and when in February and March the chief salt traders determined to go to the Hurdwar fair, they brought in unusually large supplies to meet any demand during their absence; 1867-68, therefore, opened at Delhi with unprecedentedly large stocks in hand. Throughout the year the weather in the Delhi Division was most unfavorable both for the transport

Decrease.

Cause of decrease.

* To a certain extent at the expense of that of Muttra.

and manufacture of salt. There were some rainfalls in April, May and June, and most unusually inclement weather in December, January, February and March, in each of which there were heavy rainfalls, bringing the whole salt traffic, of this and other divisions, to a complete stand-still for several days at a time, and utterly frustrating all attempts at manufacture. So powerful were these causes to depress trade that, but for a single fortunate circumstance, the decrease would have been very serious. It so happened that at the Noh mehals there were very large stocks of Salumbha salt, which had accumulated there during *several* successive years, and which the owners were, therefore, very anxious to dispose of. These poured into the market at low prices (as compared with Balumbha and Sooltanpooree) and partly filled up the blank left by Sambhur, Sooltanpooree and Deedwana, the only other salts of much importance as imports in this division.

67. The following table gives details of the amount in maunds of each description of salt imported in 1867-68 and preceding corresponding periods:—

Detail in maunds of each description of salt imported.

Year.	Balumbha.	Sambhur.	Salumbha.	Sooltanpoo-ree.	Deedwana.	Black.	Total.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
1867-68	32	70,917	1,00,354	7,07,316	1,078	8	8,79,704
Corresponding 12 months of 1866-67	32	78,106	61,775	7,62,177	1,918	189	9,04,197
Do. do. 1865-66	89	60,628	29,883	5,41,204	2,698	262	6,34,764
Do. do. 1864-65	258	48,044	38,483	5,74,769	11,250	219	6,73,023

68. The diminution in Sooltanpooree has been already explained. At the works stocks had been very much reduced, especially during the latter months of 1866-67. Unfavorable weather while impeding traffic by preventing manufacture, resulted in a rise in prices. Carriage was so scarce that the cost of transport from the works to Delhi per maund amounted to 6 annas against 2 annas during part of the previous year, and 3 annas the average rate. Withal, when the year closed, there were altogether only 46,000 maunds in store against close upon 2 lakhs (itself a small stock) in store at the end of 1866-67. The trade in Sambhur and Deedwana was partly checked by the unpropitious weather, the scarcity and heavy cost of carriage, and the cholera which in May 1867 raged in many places along the main routes of these staples; but unquestionably one main cause of the falling off in both these salts in the Delhi Division was the Shekhawattee scarcity. In Salumbha the increase has already been noticed. Supplies of other and superior sorts short, their prices high; large stocks of past years, which the proprietors were most anxious to get rid of, in store at Noh, no other result but what actually ensued could have been expected.

Fluctuations in imports examined.

69. Turning now to sugar, we find that the Delhi Division was to a great extent beyond the influence of the local causes that, in Sirsa and Hansie, counterbalanced the effects of those general stimulating influences which the trade, as a whole, enjoyed during 1867-68. Delhi accordingly gave us under this head a large increase, as did all the other great sugar divisions, Muttra, Agra

Sugar.

and Jhansie. The following figures show the proportions in which the increase, in this division, was due to refined and raw sugars respectively :—

Detail in maunds of sugar exported across the Delhi Line.

Year.	Refined.	Unrefined.	Total.
	Mds.	Mds.	Mds.
1867-68	3,55,197	5,50,704	9,05,901
Corresponding 12 months of 1866-67...	2,64,267	5,53,718	8,17,985
Do. do. 1865-66 ...	2,94,573	6,12,189	9,06,762
Do. do. 1864-65 ...	2,79,878	5,61,488	8,41,366

From the above it will be seen that the whole increase was in refined sugar, with which facilities of transport by rail permitted Mirzapore, and other marts below Allahabad, to supply the revived demand in Rajpootana.

Miscellaneous.

70. The miscellaneous items of receipt, fines, forfeitures, double duty, shares and the like, first credited as receipts, and then debited under charges on distribution to the men, require no special mention.

CHARGES.

71. The total charges for the Delhi Division for 1867-68 amounted to Rs. 1,59,451, being somewhat in excess of those of former years, with which I now proceed to compare them in detail.

Detail of charges for the past and three preceding years.

Year.	Fixed.	Contingencies.	Petty constructions and repairs.	Total.
	Rs.	Rs.	Rs.	Rs.
1867-68	1,40,243	9,880	9,328	1,59,451
Corresponding period of 1866-67	1,38,256	10,361	.....	1,48,617
Do. do. 1865-66 ...	1,35,552	10,437	.....	1,45,989
Do. do. 1864-65 ...	1,40,262	9,649		1,49,911

The increase during the past year in fixed establishment is almost exclusively due to the increase of the Collector's salary since March 1867. In contingencies there has been little fluctuation, and the large sum now appearing for the first time in our accounts, under the head of petty constructions and repairs, has in former years been charged to the Department Public Works.

NET REVENUE.

72. The net receipts for the past year amounted to Rs. 30,48,097,* which may thus be contrasted with those of previous corresponding periods :—

Year.	Gross collections.	Charges.	Net receipts.	Percentage of charges on gross collections.
	Rs.	Rs.	Rs.	
1867-68...	32,07,548	1,59,451	30,48.097	nearly 5
Corresponding period of 1866-67	31,88,507	1,48,617	30,39,890	4·7
Do. do. 1865-66 ...	24,33,252	1,45.989	22,87,263	6
Do. do. 1864-65 ...	25,15,097	1,49,911	23,65,186	nearly 6

* Of this 1¼ lakhs in reality belongs to Muttra, the goods for which they were paid having crossed the Muttra Line (*vide* para. 64 of the General Review).

The addition of the Public Works charges has slightly increased the percentage of 1867-68 as compared with that of the preceding corresponding period. As already repeatedly explained no useful inference can be deduced from the percentage of charges in any single division.

COURSE OF TRADE.

73. The main staple of this division is naturally the Sooltanpooree salt made close to the centre of the Line under our own immediate check. The central posts pass the whole produce. On the western portion of the division pass Sambhur and Deedwana, of which Bhewanie and Rewaree are the leading marts above Line, and on the eastern portion of the Line the Salumbha salts find an outlet. Sambhur, as already noticed under the Hansie Division, although owing to a local cause slightly below the level of the preceding 12 months, promises to progress and become year by year a more important article of import in this division, until at any rate a railroad from the lake to Agra diverts the present course of trade. Of Deedwana little is here ever imported, and the quantity yearly decreases. Salumbha manufactured at the Noh Mehals opposite to, and some 14 miles distant above Line from our Sylanee post, is, with the exception of the produce of one set of works or "*Surr*" (Malub), much inferior to Sooltanpooree salt, and only rises into much importance as an import when circumstances combine to raise the price or diminish the supply of the former as they did during the past official year.

SALT MANUFACTURE.

74. Some further notice of the manufacture of these salts at Sooltanpore and Noh (to each of which group of works an Assistant Patrol is attached) may not be out of place. Ten "*surrs*," or saline tracts, are included in the Sooltanpore Circle, of which the most important are Moobarikpore and Busseerpore, and in the following table I have thrown together some of the leading facts in regard to the works :—

Sooltanpore.

Sooltanpore Mehals.

YEAR.	No. of wells.	No. of pans.	Amount in store at commencement of year.	Amount manufactured.	Amount sold during year.	Amount in store at close of year.
			Mds.	Mds.	Mds.	Mds.
1867-68 ...	246	3,799	1,90,443	5,76,908	7,20,934	46,417
1866-67 ...	237	3,506	2,91,370	6,72,902	7,73,829	1,90,443

It will be seen that while there were more pans and wells at work in the past than in the preceding year, the outturn of the latter was, owing to the very unfavorable season, fully 14 per cent. below that of the former, and moreover that whereas the stock in store amounted at the close of 1865-66 to close upon three lakhs of maunds, and at the close of 1866-67 to nearly 2 lakhs (the former being about the normal amount), it had at the close of 1867-68 been reduced to less than half a lakh of maunds.

The position and prospects of these works are good, and the manufacture may be expected to increase steadily, but to admit of its thorough developement, increased facilities of transport of salt from the works to Delhi, suggested in the General Review, and the abolition of the Hakimee Tax, are essential. This latter imposition has been so often discussed that I need not re-open the question here, especially since, a recent letter from the Deputy Commissioner leads me to believe that, in all probability, no new lease of the right to levy it will be granted on the expiration of the present farm. Either the tax should be altogether remitted or the realization of it made over to us. At present the oppressive manner

in which it is exacted at some of the surrs positively paralyses manufacture, and this is the case at Sooltanpore itself. *Vide further para.* 78, *General Review.*

Noh. The Noh works are far inferior in both extent and quality of produce; they contain only 58 wells and 902 pans. As at Sooltanpore, the manufacture suffered greatly from constant rain, so that the produce was only two-thirds of that of the former year, although the number of the wells and pans had somewhat increased. These works, previous to their being placed under Mr. Jones, the present Assistant Patrol, were not as well looked after as they should have been, and the following details, though approximately correct, are not as reliable as those given for Sooltanpore :—

Noh Mehals.

Year.	Number of wells.	Number of pans.	Amount in store at commencement of year.	Amount manufactured in year.	Sold during year.	In hand at close of year.
			Mds.	Mds.	Mds.	Mds.
1867-68 ...	58	902	493,732	106,545	206,119	394,158
1866-67 ...	55	887	427,366	165,345	98,979	493,732

The inferior quality of the salt accounts for the large stocks in hand as compared with Sooltanpore. I see no prospect of a better salt being made until the process of manufacture is a good deal modified, and this, as it would require a considerable outlay of capital, the dealers (who advance all the funds for the manufacture) would not hear of.

Sugar. 75. Of the refined sugar that crosses the Delhi Line, much comes from below Allahabad by rail, and a good deal from Rohilcund; some of the refined and the majority of the raw sugars are drawn from the canal and khadir lands west of the Jumna, not a little being supplied by the country lying between the Line and Delhi, along the Sahibee and Nujuffgurh Canal and Jheel.

SMUGGLING. 76. Smuggling has, on the whole, been kept well in check during the past year. In one beat, Awul, which is the Headquarters of the Ranghurs, there is always much trouble, and without in any way insinuating any want of cordiality on the part of the Revenue authorities, I yet think that if we met in Rohtuck with the same assistance that we have received in Sirsa from Colonel Dwyer and his subordinates, the interests of the State would be benefitted. One important attempt to smuggle above 100 maunds of Sambhur salt occurred in the Pulwul beat. It was frustrated, and the salt and animals on which it was laden captured before they reached the Line, but it is none the less unsatisfactory, as had the discipline of the beat been in all respects what it should have been, the utterly hopeless nature of such an enterprise ought to have prevented even the attempt. With this exception I may say that the preventive arrangements of this division have been very satisfactory.

PENAL ACTION OF THE DEPARTMENT. Persons. 77. Altogether 97 smugglers were captured, of whom 28 were released by the Departmental officials, and 69 committed; these were thus disposed of—

Acquitted.	Convicted.		
	Paid fines.	Underwent imprisonment.	Total.
7	49	13	62

OF THE IMPERIAL CUSTOMS LINE FOR THE OFFICIAL YEAR 1867-68.

In the General Review I have alluded to the great lenity shown by many of the judicial tribunals of the country to prisoners convicted of infringing the salt laws. Of the 49 persons fined or at least who paid fines, scarcely *one* was mulcted to the extent of Rs. 10. The aggregate amounted to only Rs. 323, and the average was scarcely Rs. 6-8. Where even a head-load venture, if successful, ensures a profit of from Rs. 3 to Rs. 4-8, such punishment appears little likely to deter offenders. Again, of the 13 imprisoned, not one apparently underwent three months' imprisonment.

Goods.

78. Besides fines and imprisonment some 328 maunds of salt and sugar (chiefly the former), valued at about Rs. 550, were confiscated, and double duty to the extent of Rs. 2,450 levied. As confiscations and double duty levies require the sanction of the Revenue Commissioner, it is satisfactory to record that in no single one of the 797 cases reported was the solicited sanction withheld.

HEDGE.

79. Throughout this division the dry hedge is now in very good order, from 8 to 10 feet in height, and practically all but impenetrable. In about two-thirds of the division the live hedge is in fair order, but in the remainder special difficulties have hitherto prevented success. No doubt by digging a number of pucca wells, and providing each with a regular establishment of bullocks, men, &c., the hedge could be reared, but I am not yet prepared to advocate so expensive an arrangement, and experiments are being made at Gurhee Hursroo and elsewhere, to see if no simpler plan can be devised.

OFFICERS.

80. The Collector, Mr. W. W. Wright, the senior on the Line, is one of our best and most experienced officers. His annual report is a creditable one, and he has shown much tact and judgment in managing the very important division entrusted to his charge.

Of subordinates, Messrs. F. R. Blewitt and Synnott, Patrols, deserve prior mention, both are excellent officers. Mr. Clarkson, Patrol. has also done well. Of the Assistant Patrols, Baboo Kalee Narain Roy, of Sooltanpore, and Mr. U. Kalonas, of Awul, have, I think, best deserved special notice, although some others of the young officers have also done well.

ALLAN HUME,

Commissioner of Imperial Customs.

Appendix II.

Review of the Administration of the North-Western Provinces' Section of the Imperial Customs Line for the official year 1867-68.

N. W. P. SECTION. IMPERIAL LINE. Its course.

1. The North-Western Provinces' Section of the Imperial Line commences on the borders of the Muttra District, some five miles north-west of Kosee, and running through the districts of Muttra, Agra, and Etawah (everywhere west and south of the Jumna), Oorai, Jhansie, and Lullutpore, terminates in the latter, some 16 miles south of the town of that name.

Length.

2. Its total length is 326 miles ; it comprises three divisions, *viz.*, those of Muttra, Agra and Jhansie, the Head-quarters of whose Collectors are at these several cities, the Line itself running some five miles south and west of the two former. Altogether, fifteen Patrols, and 14 Assistants are posted along it.

A separate detailed review of each division has been appended, and it is consequently with provincial results that I shall here chiefly deal.

FINANCIAL RESULTS. GROSS REALIZATIONS

3. The gross realizations of the North-West Provinces' Section of the Line for 1867-68, amounted to Rs. 51,51,428, or nearly 1·7 per cent. in excess of those for the previous official year 1866-67. This latter, however, consisted of only 11 months, so that no useful comparison can be instituted between its results and those of the past official year of 12 months. Comparing this latter with the previous *corresponding period*, we find that there has been a decrease in 1867-68, of Rs. 4,58,200, or 8 per cent.

compared with those of previous years.

4. To form, however, a satisfactory estimate of the past year's operations, it will be necessary to contrast its collections, under each great head of revenue, with those of the previous official year (11 months), and previous corresponding 12 monthly periods. This is done in the following :—

Detail of gross realizations for the North-Western Provinces in 1867-68 *and previous years.*

Year.	Salt.	Sugar.	Miscellaneous.	Total.
	Rs.	Rs.	Rs.	Rs.
1867-68	45,10,552	6,33,856	7,020	51,51,428
1866-67 (11 months) ...	46,76,240	3,81,220	4,709	50,62,169
Corresponding 12 months of 1866-67	51,49,441	4,55,254	4,933	56,09,628
Ditto ditto 1865-66 ...	46,19,353	5,21,106	9,243	51,49,702
Ditto ditto 1864-65 ...	40,71,295	4,64,742	13,547	45,49,584

It will be seen that while in salt there has been a *decrease* of $3\frac{1}{2}$ per cent., as compared with the 11 months of 1866-67, of nearly $12\frac{1}{2}$ per cent., as compared with the full 12 months of that year, and $2\frac{1}{3}$ per cent., as compared with the corresponding 12

months of even 1865-66, there has been an *increase* in sugar, not only of more than 39 per cent., as compared with the 12 months of 1866-67, but also of 21½ per cent., as compared with the 12 months of 1865-66, the most successful sugar year the North-West Provinces had ever previously enjoyed.

Salt.
Causes of decrease.

5. The general causes which, during the past official year, have operated to depress the salt trade of Upper India as a whole, have been fully discussed in the General Review. Here, it is necessary to notice that the immediate cause that most seriously affected the North-Western Provinces' Section, was the rise in price and partial failure in the manufacture of Balumbha salt, which constitutes two-thirds of the whole imports of this section, and in which alone, as will be shown further on, any material decrease has occurred.

6. Other causes also contributed. The Muttra collections are steadily decreasing, first, because the opening of the rail to Delhi is, month by month, improving the trade of that division at the expense of that of Muttra, and second, because by our system of accounts (*vide* para. 64 General Review) Delhi has credit for all payments made into its treasury; and yearly, more and more of the duty on imports, in reality crossing the Muttra Line, is paid in at Delhi.

7. The same copious rains and generally unfavorable season that reduced the Balumbha produce, acted in Jhansie to diminish the Sambhur trade. The preceding very dry year, with its plentiful carriage seeking employment, had led to unprecedented imports into Jhansie. Then came the past official year; for months half the Line in this division was under water; the black soil barred all traffic; and when, later in the year, the salt trade revived, the whole available carriage of the neighbourhood was absorbed in the conveyance of grain to Malwa and Kotah, where there appears to have been a scarcity.

Fluctuations in the realizations of the various divisions.

8. How far the salt collections of the several divisions, respectively, have been affected, will be seen from the subjoined table:—

Year.	Muttra.	Agra.	Jhansie.	Total.
	Rs.	Rs.	Rs.	Rs.
1867-68...	12,46,257	28,96,994	3,67,301	45,10,552
Corresponding 12 months of 1866-67	14,19,719	33,16,932	4,12,790	51,49,441
Do. do. 1865-66 ...	15,13,724	27,40,829	3,64,800	46,19,353
Do. do. 1864-65 ...	13,03,364	23,99,937	3,67,994	40,71,295

The collections of both Agra and Jhansie, in 1867-68, exceeded, it will be seen, those of the corresponding periods of 1865-66; however much they fell short of those of the intermediate 12 months; Muttra, on the other hand, fell immensely below its position of 1865-66. This position, however, a merely temporary one, and the highest it has ever occupied, was due to the opening of the rail, to stations opposite to Muttra, before its entire completion to Delhi, and the realizations of that period (1865-66) must, therefore, be regarded as abnormal and exceptional. Compared, however, even with 1864-65, a decrease is observable, and that is

due to the manner in which, as above explained, Delhi is absorbing part of the trade of Muttra, and obtaining, yearly, credit for the duty paid on a larger and larger portion of the part that yet remains.

9. The fluctuations during these same periods, in the proportions in which the different kinds of salt were imported into these provinces, are shown in the following table :— *Detail of the different descriptions of salts imported.*

YEAR.	Balumbha.	Sambhur.	Salumbha.	Sooltanpooree.	Miscellaneous.	TOTAL.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
1867-68	10,59,144	3,19,459	1,10,086	14,699	41	15,03,429
Corresponding 12 months of 1866-67.	13,34,986	3,21,057	50,553	9,471	316	17,16,383
Do. do. 1865-66 ...	11,92,323	2,84,018	55,795	7,175	476	15,39,787
Do. do. 1864-65 ...	10,47,200	2,43,560	52,768	1,698	1,134	13,46,360

Only three descriptions of salt cross this section of the Line in any considerable quantities. Sooltanpooree almost exclusively crosses in the Delhi Division ; although, paid for in Agra, it appears under the imports of this latter division. Of the three staples that really cross the Line, Balumbha is the only one that has much decreased. Causes, already explained, account for much of the sudden decline in the past year, but, as noticed in the General Review, my impression is that defective arrangements in the Bhurtpore state are tending seriously to injure the salt manufacture there, both by enhancing the cost of production and rendering it, therefore, less able to compete in distant marts, and by deterring traders from making those advances to the manufacturers, on which the whole system rests.*

10. It is a remarkable fact, proving that the diminution in our imports is due, not to a diminution of consumption in the neighbourhood of the Line, but to the inability of Balumbha to compete, as it has formerly done, in distant marts ; that in the Agra Division, the whole decrease is in Balumbha ; and Bichpooree being the post by which all supplies for distant marts cross, the whole decrease of the Agra Division is at Bichpooree, every one of the other nine open posts of the division, which supply neighbouring marts and populations, having yielded an increase.

11. The Sambhur trade is steadily increasing, chiefly in consequence of the increased area of distribution which transport by rail is giving to this favorite salt.

In spite of all obstacles and depressing influences, there was, in this past year even, an increase in the imports of Sambhur, in both the Agra and Muttra Divisions. Compared with those of the exceptionally prosperous period which preceded that under review, Jhansie does show a decrease, it is true, but it is only as compared with 1866-67, in which year the imports of Sambhur suddenly rose 12 per cent., and large stocks accumulated ; in no other year have the Jhansie imports risen to the level of 1867-68.

12. In Salumbha the increase is temporary, and is due, as has been elsewhere explained, to the shortness of supply and rise

* Fettered as the Political Agent is by the dilatory action of the Regency Council, he is powerless to avert the slowly growing evil, and it would be fortunate for Bhurtpore if the common prayer of all concerned in the salt trade there, could be granted, and every thing connected with the manufacture be placed under the direct and immediate control and orders of the Political Agent.

in price in both Sooltanpooree and Balumbha, forcing into the market the long stored stocks of Noh, which, owing to their inferior character, had remained for years unsold, and which, on this account, the owners were glad to dispose of, at prices which rendered it comparatively cheap.

Sugar.

Increase.

13. The general causes (discussed in the General Review) that during the past year operated to stimulate the sugar trade of Upper India, were in full play throughout the Central or North Western Provinces Section of the Imperial Line, without any serious counterbalancing depressing influences, such as those which, in Sirsa and Jhansie, so injuriously affected our exports. Accordingly, in each of our three North-West Divisions there has been an increase, as will be seen in the following table:—

Fluctuations in the realizations of the several divisions.

Year.	Muttra.	Agra.	Jhansie.	Total.
	Rs.	Rs.	Rs.	Rs.
1867-68	1,65,548	3,77,112	91,196	6,33,856
Corresponding 12 months of 1866-67	1,53,912	2,28,153	75,189	4,55,254
Ditto ditto 1865-66	1,66,276	2,63,700	91,130	5,21,106
Ditto ditto 1864-65	1,46,522	2,42,958	75,262	4,64,742

A great difference is, however, observable. In Muttra and Jhansie, the exports, though respectively 7½ and 24½ per cent. above those for 1866-67, have only risen to the level of those of 1865-66, whereas in Agra, the increase is enormous; in fact 65 per cent., as compared with 1866-67, and no less than 43 per cent., as compared even with 1865-66. The cause of this difference is to be found in the greater facilities for transport; a railroad *to* Agra, from the east, and metalled roads *from* Agra to Jaipore, on the west, and Indore on the south, concentrating on this division, the bulk of the through "trade."

14. The following table exhibits the proportions in which, in successive periods, the raw and refined article, respectively, have contributed to our sugar revenue:—

Detail of refined and unrefined exports.

Year.	Refined.	Unrefined.	Total.
	Mds.	Mds.	Mds.
1867-68	4,60,489	4,62,366	9,22,855
Corresponding 12 months of 1866-67	3,24,984	3,47,390	6,72,374
Ditto ditto 1865-66	3,37,110	4,90,656	8,27,766
Ditto ditto 1864-65	3,06,863	4,21,011	7,27,874

As I have elsewhere remarked, one of the great stimulants our sugar trade has enjoyed, has been the increased facilities of transport afforded by the rail, enabling distant eastern marts, when well stocked by an abundant crop, to send their surplus into the markets of the west. Necessarily, it would be chiefly the more valuable qualities that would be most worth long carriage, and hence it is chiefly in the refined article, that the vast increase observable has taken place.

Miscellaneous.

15. Of the variation in our miscellaneous revenue no explanation seems necessary, this consisting, almost exclusively, of fines and forfeitures, first credited as a receipt under this head; and later, on distribution to informers, and the establishment, debited as a

contingent charge. A lucky seizure, a heavy case, or the presence of two or three district officers, who do *not* consider Rs. 5 per head a sufficient fine for the professional smugglers convicted by them, largely swell the miscellaneous account one year; while the absence of such circumstances in the next, reduce it in like manner.

CHARGES.

16. The total charges of this section amounted for 1867-68, to Rs. 4,49,594, which, with the subordinate totals that compose it, may thus be contrasted with similar ones, in previous corresponding periods :—

Details compared with those of previous years.

YEAR.	Fixed.	Contingencies.	Petty constructions and repairs.	TOTAL.
	Rs.	Rs.	Rs.	Rs.
1867-68	4,22,564	14,811	12,219	4,49,594
Corresponding 12 months of 1866-67 ...	4,31,801	15,532	6,776	4,54,109
Ditto ditto 1865-66 ...	4,34,938	16,447	.....	4,51,385
Ditto ditto 1864-65 ...	4,24,036	13,987	.....	4,38,023

The slight fluctuations observable in fixed and contingent expenses, will be explained in the several Divisional Reviews; and as regards the increase, observable in petty constructions and repairs, it is only during the past, and a portion of the preceding year, that these have been charged in our accounts, instead of, as previously, debited to the Department Public Works.

NET REVENUE

17. The net revenue of the North-Western Provinces Section for 1867-68, amounted to Rs. 47,01,833, which may be thus compared with that of previous corresponding periods :—

compared with that of previous years.

YEAR.	Gross Collections.	Charges.	Net Receipts.	Percentage of charges on gross collections.
	Rs.	Rs.	Rs.	
1867-68	51,51,427	4,49,594	47,01,833	8·72
Corresponding 12 months of 1866-67	56,09,628	4,54.109	51,55,519	8·09
Ditto ditto 1865-66 ...	51,49,702	4,51,385	46,98,317	8·76
Ditto ditto 1864-65 ..	45,49,584	4,38,023	41,11,561	9·62

The increase in the percentage of costs on realizations, in the past, as compared with the previous year, is due, as will have been seen, not to an increase in charges (for these have really slightly diminished), but to the addition of Public Works charges, and to decrease (already explained) in collections. No deduction of any value can be drawn from this percentage, which in no way truthfully represents the cost at which the revenue was realized. It includes the whole charge for Commissioner and Deputy Commissioner and their offices, and it excludes the cost of the Internal Department, to which, it is not too much to say, fully half our North-Western Provinces revenue is due. This, however, is not all. The North-Western Provinces owe their large revenue, in a great measure, to the Central Provinces preventive divisions, so that, in fact, it is only when the total realizations of the whole department in all branches, are contrasted with the total cost,

that any approximate idea even of the real percentage that the cost of collection bears to the amount realized, can be obtained. This question has been considered in the General Review (paras. 56, 57), and need not here be further discussed.

COURSE OF TRADE.

Salt.

18. The most important of our imports, in the North-Western Provinces, is still the Bhurtpore salt. From 40 to 50 thousand tons are annually received, of which two-thirds come through the Agra Division by the direct metalled road *viâ* Bichpooree, and one-third enters by the Muttra Division, chiefly by the metalled road *viâ* Koombher, Deeg, Goburdhun and Sithoa. Of the salt that comes *viâ* Muttra, much is absorbed by local consumption in the Upper Doab, in Rohilkund, and Western Oudh. Of that which enters by Agra, a larger proportion is despatched by rail, supplying the Central and Lower Doab, the south and south-east of Oudh, and the country east of Allahabad. Very little of this salt finds its way south of the Jumna, into British territory.

19. Sambhur salt is imported in all the three divisions, but in very different proportions. From 11 to 13,000 tons are yearly received, of which Muttra passes about $\frac{1}{13}$th, Agra $\frac{7}{13}$ths, and Jhansie, of which division it forms the sole import, $\frac{5}{13}$ths. From Agra and Muttra, Sambhur pretty well keeps company with the Balumbha, being to the well-to-do natives of Upper India, what Balumbha, Sooltanpooree and Salumbha are to the lower classes; but it is to me by no means clear as yet, what salt forms the staple of consumption with the poorer classes in the rear of the Jhansie Division. Some Balumbha comes in *viâ* Cawnpore, Bhogneepore and Calpee; some by Futtehpore and the Chillatara Ghât; some Choottea is smuggled in from Gwalior; some small grained salt, a mixture probably of Rewah (*vide* para. 15 General Review) and Balumbha, comes in through Banda and Mowraneepore; but although, when my investigations are completed, all may possibly be satisfactorily explained, I am not at present satisfied as to the sources from which the poorer classes in British Bundelkund obtain their unquestionably plentiful supply of cheap salt, and am much afraid that an important proportion of this will prove to be Rewah salt that has paid *no duty*. As for Sooltanpooree and Noh salts, the only other North-Western Provinces imports which are of any importance, their average scarcely reaches 5,000 tons a year, and of this (though much of the duty is paid elsewhere, as at Agra and Delhi), by far the greater portion crosses the upper portion of the Muttra Line. This import is almost entirely for local consumption. Salts of this description, intended for distant marts, as a rule, go to Delhi.

Sugar.

20. Of the course of our sugar trade, much less is known. So much of the sugar is now brought up by rail from eastern marts, that we cannot make certain where much of it is produced. About 20,000 tons are exported from Agra, almost entirely received by rail from down country; some 10,000 tons are sent from Muttra, received from both up and down country *viâ* Allygurh, Hatras and Juleysur; while 5,000 tons, or thereabouts, are exported from Jhansie, of which probably the greater portion is derived from eastern marts, rail borne to Cawnpore, and thence by road, *viâ* Calpee.

SMUGGLING.

21. Smuggling, during the past year, has been well kept in check in the Muttra and Agra Divisions. For some years past it has never, in these divisions, assumed any great importance,

and during the past year, there has, I think, unquestionably been less than in any previous year. In Jhansie, smuggling has never been thoroughly put down. It has ceased to exhibit the formidable features it once did; gang smuggling, by open violence, is now unheard of, but petty smuggling is still rife. Above Jhansie, this latter has been much on its usual scale; below Jhansie, towards Lullutpore, a certain increase, due, it is said, to the partial failure of the crops in the neighbourhood, is observable. Until the men are better paid, and the hedge is everywhere a more efficient barrier, I cannot see my way to any very material reduction of petty smuggling in the Jhansie Division.

PENAL ACTION OF THE DEPARTMENT.

Persons.

22. I have, in the General Review, noticed the great importance that I attach to the most careful supervision of the penal action of the department, and I have there discussed some of the leading points connected with the subject. Here I shall chiefly confine myself to exhibiting the extent of that action during the past year in the North-West Provinces Section of the Line. Altogether, 1,286 persons were arrested for breaches of the Customs' laws in 1867-68, against 1,119 in the previous year; but of the former, 1,020 were released by the department, on payment of single or double duty, against only 886, similarly discharged in 1866-67. It is, in my opinion, essential that only the most clearly wilful violators of the law should be brought before the Criminal Courts, and that in all cases where any reasonable excuse can be made, where the offender is a respectable man, not previously known as a smuggler, where ignorance of our rules can be fairly supposed possible, as well as in all cases where the quantities are so small as to be clearly intended for personal consumption, we should content ourselves with levying single or double duty, and abstain from prosecutions. My views on this subject are now known to all my subordinates, and it is not improbable that next year's return may show a still larger number of petty breaches of the law passed over without reference to the Criminal Courts, and, at the same time, a still higher percentage of convictions on the committals actually made. How the persons committed during the past and present year were disposed of by the Courts, is shown in the following table :—

Number of smugglers committed for trial.		Number of smugglers acquitted.		Number of smugglers convicted.		Percentage of convictions on committals.	
1866-67.	1867-68.	1866-67.	1867-68.	1866-67.	1867-68.	1866-67.	1867-68.
233	266	17	26	216	235	92·7	88 4

23. It does seem a pity that, after the trouble that has been taken to make officers understand the importance of never committing a case in which, humanly speaking, a conviction is not *certain* to follow, our percentage of convictions to committals should be rather lower than in the previous year, but it has been the result of circumstances beyond our control. Lower, however, though the percentage be, it is yet, as noticed in the General Review, far higher than that of the convictions on the committals of the judicial officers of the North-Western Provinces, Punjab, Central Provinces, or Oudh, in either 1864, 1865 or 1866.

While, therefore, improvement is desirable, and indeed *necessary*, even the results now obtained, appear to me highly creditable to our officers.

24. Turning now to the punishments inflicted, we find that 22 paid fines, and 213 underwent imprisonment in default. Of those who paid fines, 14 were fined 1 rupee apiece, and 8 were fined from 10 to 15 rupees, averaging less than Rs. 12 apiece. Two hundred and thirteen were imprisoned; in this number were probably included some 40 to 50 professional smugglers, but no man was sentenced to even three months' confinement; 101 were imprisoned for two months, 77 for one month, 34 for 15 days, and 1 for 10 days.

25. I cannot avoid the conviction that the sentences of our Courts are too often marked by undue leniency, and that the insufficiency of the punishments awarded, encourages, rather than helps to prevent smuggling. On our part, it will be our endeavour to prosecute criminally only those palpably wilful violators of the law, for whom no reasonable excuse can be made, and it is possible that Government may be willing to impress upon judicial officers generally, the necessity of a little wholesome severity on their part, when offenders of this description are convicted.

Goods.

26. Besides Court prosecutions, confiscation of 736 maunds of salt and 196 maunds of sugar, valued at Rs. 1,250, and the levy of double duty to the amount of Rs. 2,504, were enforced by the Revenue Commissioners, on the recommendation of this department. It is satisfactory to know that of 1,098 such recommendations, made during the year by the various Collectors of this section to the several Revenue Commissioners, no less than 1,091 were approved, and in only seven cases a difference of opinion occurred.

HEDGE.

27. Very considerable improvement has been effected in the hedge during the past year. At the present moment, throughout the Muttra, Agra and some three-fourths of the Jhansie Divisions, a good hedge, live or dry, presents, as a whole, a nearly impassable barrier to smugglers. Local accidents, however, continually weaken the dry hedge; storms overthrow a mile at a time; the misdirected labor of colonies of white ants, suddenly result in large gaps; sometimes, even, portions catch or are set on fire; day by day, the work at the hedge continues, and no one out of the department at all realizes the incredible amount of labor that even 200 miles of good dry hedge (and we have more than this in this division) represents. It is calculated that every mile of good dry hedge requires 250 tons of material, and it is a very low estimate if we allot 50,000 tons to the dry hedge of the North-West Provinces Section. All this, cut by the establishment (in some places at no little risk of collision with the villagers), carried by them from distances of from one-fourth to even *five* and *six* miles, and stacked in its place. It is not too much to say that what with decay, white ants, fires and storms, at least half has to be renewed yearly. When we remember that all this has to be done by ill-paid men, who have besides 12 hours sentry and patrolling duty to do, and who alone of all the various official forces in India never have a single entire night's rest, some idea may be formed of the pressure required on the part of every officer, from the head of the department downwards, to secure the results obtained during the past year, and of the difficulty experienced in recruiting the force and keeping it up to its full complement, without admitting very inferior men.

28. A green hedge is, of course, what is to be aimed at; trouble as that costs to rear, and even when reared, to lop and trim, this latter is nothing to the unceasing work entailed by the dry hedge.

At present, matters stand thus:—Throughout the Muttra Division, there is a green hedge, but fully two-thirds of this has to be supplemented by a separate dry hedge. In places, the green hedge will improve, but, in the greater portion of the division, the shade of the trees and the kunkur dust of the metalled road along which the Line runs, prevent the hedge from growing into a thick, close, self-sufficing barrier. The difficulties of any improvement here are discussed in the Divisional Review. In the Agra Division the green hedge, for more than half the distance, is superb; in the remainder there is a strong dry hedge, which will ultimately be replaced in most places by the green hedge, now being reared. There are, however, spots where nothing but a dry hedge can ever be hoped for. In the Jhansie Division, the live hedge is mostly in its infancy. In probably three-fifths of the division it promises, in two, or at most three years to become all that is required; but at present there are only patches that do not need the duplicate dry fence. In parts of the Jhansie Division, there is no good dry hedge, and never can be, and in many places no live hedge can ever be got to grow. Here loose stone walls or other expedients must be resorted to. In places, both in the Muttra and Jhansie Divisions, where there is no prospect at present of ever rearing a *sufficient* green hedge, and where the difficulty of procuring material for the dry hedge is daily becoming greater, I shall, I believe, be obliged to apply to Government for permission to take up convenient plots of uncultivated land contiguous to the Line, on which to grow material for ourselves.

29. I have already somewhat fully explained in the General Review the course which I propose to adopt in regard to the hedge as a whole, and shall here only add that throughout the Line, at any rate from the Sutlej to the Taptee, the subject is now receiving the sustained attention it merits.

COMMUNICATIONS.

30. I have already urged, in the General Review, the extreme importance of connecting by railroad the two great sources of our North-West imports, Sambhur and Bhurtpore, with our own Railway system, and this is the only *great* measure required in these provinces. Many, however, of the roads which in these provinces lead to and from the Line have not, in my opinion, received, at any rate of late, that attention from the local authorities which their importance as trade lines would seem to demand. In regard to all such, however, a separate representation will (as noticed in the General Review, para. 89) be submitted for the orders of Government, and it is hoped that next year it may be in my power to report more favorably of these roads as a whole.

OFFICERS.

31. Of the officers attached to the North-Western Provinces Section, I would specially notice Mr. W. O. Bell, Collector of Agra, Mr. Conroy, Patrol of Bichporee, and Mr. Dutton, Patrol of Talbehut. Other officers have been favorably noticed in the Divisional Reviews; but these I consider the *most* deserving of the approbation of Government.

MUTTRA DIVISION.

MUTTRA DIVISION.
Line.

32. The Muttra Division, the fourth of those comprised in the Imperial Line and the first of the North-Western Provinces Section, commences on the borders of the Muttra District, some

five miles north-west of Kosee, and terminates in the Agra District about nine miles south east of Furrah.

Its course.

33. It runs through Kosee, Chatta, Chowmoha, Sithoa, Tarsee and Furrah, at each of which a superior officer of the department is posted, and is altogether only 52½ miles in length.

FINANCIAL RESULTS.
GROSS REALIZATIONS

34. The gross realizations of the Muttra Division for 1867-68, amounted to Rs. 14,13,051, being over 10 per cent. below those for the preceding corresponding 12 months. The following table exhibits the fluctuations during the last four years, of the collections under each great head of income:—

Detail of gross realizations of the Muttra Division.

compared with those of previous corresponding periods.

Year.	Salt.	Sugar.	Miscellaneous.	Total.
	Rs.	Rs.	Rs.	Rs.
1867-68	12,46,257	1,65,548	1,246	14,13,051
Corresponding 12 months of 1866-67	14,19,719	1.53,912	1,622	15,75,253
Ditto ditto 1865-66...	15,13,724	1,66,276	854	16,80.854
Ditto ditto 1864-65...	13,03,364	1,46,522	2,459	14,52,345

From the above it appears that while the salt revenue is lower than in any of the three last preceding corresponding periods, and no less than 12 per cent. below that of 1866-67 (the full 12 months), the sugar duties are almost equal to those levied in the most successful of past years, and fully 7½ per cent. above the amount realized in the 12 months of 1867-68.

Salt.

Decrease nominal.

35. The decrease in the salt revenue does not represent an equivalent decrease in the trade. According to the (as I deem it, erroneous*) system of accounts pursued in this department, duty is taken credit for, wherever paid, without reference to the locality at which the goods are really imported. Yearly, more and more of the duty for goods imported *viâ* Muttra, comes to be paid for at Agra, or Delhi. During the past year no less than 3 lakhs of rupees were paid into Agra and Delhi on account of goods imported across the Muttra Line, a sum considerably (*i. e.*, Rs. 85,401) in excess of similar payments in the preceding year.

Delhi ... Rs. 1,20,317
Agra ... „ 1,78,760

Real.

36. There is, however, a real decrease in the salt trade, of some Rs. 90,000, which is due chiefly to two causes—First, the development of the Delhi trade, consequent on the completion of the rail to that city; second, to the comparative failure in the manufacture and the high prices of Balumbha, the chief import of this division. When the rail was opened to Agra and later, to Allygurh, but before its completion to Delhi, a great stimulus was given to Muttra trade, and the imports of 1865-66 largely exceeded those of any previous or past year. But since the line has been finished to Delhi, Muttra has been almost monthly losing ground, as in fact has Balumbha, its great import. Sooltanpooree is displacing this latter widely, and, as I have already noticed, promises greatly to extend its area of distribution. That this has been facilitated by the failure of the Balumbha works, and consequent rise in price of the salt may be easily believed, when it is borne in mind that the total Bhurtpore outturn of

* *Vide* para. 64 General Review.

OF THE IMPERIAL CUSTOMS LINE FOR THE OFFICIAL YEAR 1867-68.

1867-68 was no less than 3,52,533 maunds below that of 1866-67, and that the rise in price was nearly 33 per cent.

37. Turning now to the details of the Muttra imports, we find that these stood as follows in the past and preceding years :—

Detail in Maunds of Salts of different descriptions imported in the Muttra Division.

Year.	Detail of Sorts.				Total.
	Balumbha.	Sambhur.	Salumbha.	Miscellaneous.	
1867-68	3,42,225	25,429	47,739	26	4,15,419
Corresponding 12 months of 1866-67	4,25,833	24,916	22,439	51	4,73,229
Do. do. 1865-66	4,42,739	29,074	32,742	20	5,04,575
Do. do. 1864-65	3,80,111	24,564	29,681	99	4,34,455

Detail of the different descriptions of Salt imported.

Balumbha salt, the greatest import of which was immediately prior to the opening of the rail to Delhi, has since then declined; the greater fall in 1867-68, as compared with that in 1866-67, being in a great measure due to shortness of supply* and rise in prices. Trade in Sambhur, like that in Balumbha and Salumbha, received an extraordinary impetus from the rail in 1865-66, but it has since sunk to its normal limits, and fluctuates but little. Salumbha, on the other hand (of which, owing to its inferior quality, large stocks had accumulated), made rapid strides, during the past year, into the area rendered partially vacant by the high prices and scant supplies of Sooltanpooree and Balumbha; the increase of more than cent per cent shown in the above table, by no means represents the actual increase of the Muttra imports of this salt, since much that really crossed the Muttra Line, was paid for in Delhi.

Sugar.

Increase.

38. In sugar, there was, as already noticed, an increase of some $7\frac{1}{2}$ per cent., as compared with the preceding corresponding 12 months. The general stimulating causes noticed in the General Review, here operated without drawbacks. The scanty supplies and high prices of 1866-67, as well as the poverty of the Rajpootana consumers, made the year open unpropitiously, and during the earlier months of 1867-68, the trade was languid, but the abundant rains of 1867 changed all this, and trade, in the later months of the year, was characterized by unusual briskness.

Refined and unrefined.

39. The following table exhibits the proportions in which refined and unrefined sugars respectively have contributed to our revenue in the Muttra Division, during the past and preceding years :—

Detail of Sugars (in Maunds) exported from the Muttra Division.

Year.	Refined.	Unrefined.	Total.
1867-68	1,10,595	1,46,541	2,57,136
Corresponding 12 months of 1866-67	1,06,763	1,25,731	2,32,494
Ditto ditto 1865-66 ...	1,04,270	1,65,349	2,69,619
Ditto ditto 1864-65 ...	91,511	1,46,696	2,38,207

* Altogether, on the 1st April 1868, there were only $2\frac{3}{4}$ lakhs of maunds remaining in store in all the Bhurtpore works.

It will be seen that, compared with a series of years, it is in refined sugar alone (which, relatively to the cost of carriage, is best worth transporting), that there has been any increase. Unrefined sugar has not regained the position to which it attained under Railway stimulus in 1865-66 and only stands at the level it occupied in 1864-65. This is what might have been anticipated. Increased facilities of transport will develop trade; but, at first at least, chiefly in those quantities of any staple on whose intrinsic value the cost of carriage forms the lowest percentage.

Miscellaneous.

40. The miscellaneous items of income, fines, forfeitures, &c., are too insignificant to need further comment.

CHARGES

41. The total charges for 1867-68, amounted to Rs. 83,683, or more than 4 per cent. below those for the preceding 12 months. The following are the details:—

Details.

Detail of charges for the past and three preceding years.

Year.	Fixed.	Contingencies.	Petty construction and repairs	Total.
	Rs.	Rs.	Rs.	Rs.
1867-68	77,261	3,429	2,993	83,683
Corresponding 12 months of 1866-67 ...	81,368	4,751	1,174	87,239
Ditto ditto 1865-66 ...	79,738	2,821	...	82,559
Ditto ditto 1864-65 ...	78,785	2,433		81,218

The decrease observable in fixed charges is due to the difference of the pay drawn by Messrs. Bradford and Campbell, the former and present Collectors, and to an extra charge in 1866-67 on account of certain arrears of pay awarded to Mr. Campbell. In contingencies, the decrease is due to this head having, in 1866-67, been swelled by the item of Rs. 1,313, a refund of duty (levied in the previous year) awarded to one Bucktawur Mull.

NET REVENUE

42. The net receipts for 1867-68 amounted to Rs. 13,29,368, which may be thus compared with those of past years:—

Year.	Gross realizations.	Charges.	Net receipts.	Percentage of charges on gross realizations.
	Rs.	Rs.	Rs.	
1867-68	14,13,051	83,683	13,29,368	5·92
Corresponding 12 months of 1866-67 ...	15,75,253	87,293	14,87,960	5·54
Ditto ditto 1865-66 ...	16,80,854	82,559	15,98,295	4·91
Ditto ditto 1864-65 ...	14,52,345	81,218	13,71,127	5·59

Percentage of cost on collections.

The percentage of cost on collections is, of course, very low. Muttra bears no portion of the Head Quarter charges, and is debited with no portion of the expenses of the Internal Department to which, with saline tracts of the Agra Division in its rear, it is no exaggeration to say that it owes one-half its revenue. Under no circumstances, however, as already elsewhere repeatedly noticed, can any useful conclusions be drawn from this percentage in any single division, or group of divisions. Like those of Agra and Delhi, the Muttra Line owes its trade,

in a great measure, to the barrier presented by other less remunerative divisions, the abolition of which would be fatal to its revenue.

SMUGGLING.

43. Muttra is a short and well manned division, and though it includes part of that portion of the Line where attempts to evade the law are necessarily most frequent, smuggling has never, for years, assumed in it a dangerous type, or materially affected our revenue. During the past year, I think that there has been even less smuggling than usual, and that, in this respect, the administration of the division has been satisfactory.

PENAL ACTION OF THE DEPARTMENT.

Persons.

44. Altogether, 201 persons (against 190 in 1866-67) were arrested for breaches of the Customs' laws, but out of these no less than 155 (against 131 in 1866-67) were released by the department, for the most part on the payment of single or double duty, as having some reasonable excuse to offer, or as having acted in ignorance. Those considered to have wilfully smuggled, were thus disposed of:—

Number committed for trial.		Number acquitted by the Courts.		Number convicted.		Percentage of convictions on committals.	
1866-67.	1867-68.	1866-67.	1867-68.	1866-67.	1867-68.	1866-67.	1867-68.
59	46	2	2	57	42	96·6	91·3

NOTE—Two smugglers, committed in 1867-68, were still under trial when the returns were made up; adding these, the percentage rises to 95·6.

None of the 42 persons convicted paid the fines imposed; all were sentenced in default to one month's imprisonment. As I have elsewhere remarked, considering that we only prosecute the clearest cases of wilful violation of the law, I believe that greater severity, in some at least of the cases would have a beneficial effect.

Goods.

45. Besides Court prosecutions, the confiscation of 127 maunds of smuggled goods (almost exclusively salt) valued at about Rs. 150, and the levy of double duty, to the amount of Rs. 828, were enforced, on the recommendation of the department, by the Revenue Commissioner. Two hundred and fourteen such recommendations were submitted, and sooner or later, all received the requisite sanction.

HEDGE.

46. The dry hedge in this division is *now*, as a whole, better than it has ever been before. Indeed, with the exception of three or four miles of it, in the Chatta and Furrah beats, it may be pronounced to be entirely satisfactory. Even where least good, it is a nearly impenetrable barrier, but the yearly increasing difficulty of procuring material and the great labor that its transport costs the men (leading to constant desertions) renders its future prospects a source of serious anxiety. As regards the green hedge, it is very satisfactory in places where the Line runs by minor roads, but much of the Line in this division follows the course of the main metalled road, and there the shade of the road side trees and the great dust of traffic prevents the growth of any close, compact, healthy green hedge.

47. A number of courses are open to us, but all present grave objections to their adoption. To cut down, for 30 or 40

miles, all the trees on one side of an important thoroughfare, is not to be thought of. To plant a new hedge some little distance from the road, would entail the assumption of much valuable arable land; while to move the Line altogether would require the taking up some new land, and the abandonment, at heavy cost, of the houses and quarters of officers and men. I have been over the ground myself, and at present, I confess, scarcely see my way to improve our existing arrangements, and so long as we can manage, with whatever difficulty, to get together material for the dry hedge, no change is urgently necessary. Hereafter, if I can do nothing else, I shall solicit permission to take up small patches of waste land alongside the Line, and there rear a constant supply of material for the dry hedge.

COMMUNICATIONS.

48. Little can be said of the state of repair in which some of the lines of road most important to this division, have been kept during the past year; but, as noticed in the General Review, I propose to adopt a system of bringing these lines yearly to the special notice of Government, in such a manner as will probably lead to an amelioration in their condition.

OFFICERS.

49. Mr. Campbell, the Collector of this division, is a gentleman of high personal character and a very old and faithful servant of Government. I regret, therefore, to be compelled to record that, in almost every detail of his administration, I have noticed a want of energy and interest in his work that has materially affected his utility as a public officer. Mr. W. Beatson, Patrol of Furrah, is the only subordinate officer whom I shall here notice; he has only recently joined this division, but he is, I believe, a steady, hardworking, and thoroughly trustworthy officer.

AGRA DIVISION.

AGRA DIVISION.
Line:

50. The Agra Division, the fifth of the ten comprised in the Imperial Line, and the second in the North-West Provinces Section of the same, commences in the Agra District, about 5½ miles west of Bichpooree, and running down the Jumno Chumbul Doab, terminates on the banks of the latter river at Palee about 5½ miles south-east of Chuckernuggur.

its course.

51. It runs through, or near to Bichpooree, Mulpoorah, Kukoobah, Dhimsurree, Futtehabad, Gujourah, Bah, Jeitpoor, Suraetal, Burhpoora and Chuckernuggur (at each of which places a Patrol or Assistant Patrol is posted), and has a total length of 105 miles.

FINANCIAL RESULTS.
GROSS REALIZATIONS

52. The gross realizations of the Agra Division for 1867-68, amounted to Rs. 32,77,748, or more than 7½ per cent. below those for the previous corresponding 12 months. This latter period, however, was one of exceptional prosperity, so far as the department is concerned, and it is necessary to the formation of a just idea of the results of the past year's operations, to contrast them with those of at least the three preceding periods, thus—

Details of gross realizations of the Agra Division.

ompared with those of previous corresponding periods.

YEAR.	Salt.	Sugar.	Miscellaneous.	TOTAL.
	Rs.	Rs.	Rs.	Rs.
1867-68	28,96,994	3,77,112	3,642	32,77,748
Corresponding 12 months of 1866-67	33,16,932	2,28,153	2,292	35,47,377
Ditto ditto 1865-66 ...	27,40,829	26,3,700	6,123	30,10,652
Ditto ditto 1864-65 ...	23,99,937	24,2,958	5,191	26,48,086

OF THE IMPERIAL CUSTOMS LINE FOR THE OFFICIAL YEAR 1867-68.

From the above it appears that 1867-68, though falling short of 1866-67, far surpassed its other predecessors, while, even as compared with 1866-67, it is only in salt that the past year exhibits a deficiency, its sugar collections being the largest ever yet realized.

53. Most of the causes noticed in the General Review, as having operated to depress the salt trade as a whole, more or less affected the great Agra branch of it. But the one cause above all others, to which the decrease here is especially due, was undoubtedly the short supply and high price of Balumbha salt, which occurring simultaneously with a fall in price and increase in import of eastern salts, affected, in a remarkable degree, the sale and import of Agra's chief duty staple, as will be seen from the subjoined table :—

Salt.

Decrease.

Detail in Maunds of Salts of different descriptions imported across the Agra Division.

Year.	Detail of Sorts.					Total.
	Balumbha.	Sambhur.	Salumbha.	Sooltanpooree.	Miscellaneous.	
1867-68	7,16,963	1,71,658	62,344	14,696	2	9,65,663
Corresponding 12 months of 1866-67	9,09,142	1,58,891	28,114	9,471	26	11,05,644
Ditto ditto 1865-66..	7,49,584	1,33,717	23,053	7,175	80	9,13,609
Ditto ditto 1864-65..	6,67,089	97,199	23,081	10,738	1,872	7,99,979

Detail of different descriptions imported.

Notwithstanding all mismanagement, the facilities of transport afforded by rail had theretofore been steadily developing the Agra Balumbha trade, but in 1867-68 there was a sudden fall of more than 20 per cent. in the quantity of this salt imported. In every other description of salt imported *to*, or for which duty was paid *at*, Agra (for very little of the Salumbha or Sooltanpooree, above entered as Agra imports, actually cross its Line), there has been a considerable increase, due both to the increasing sphere of distribution of Sambhur and Sooltanpooree (especially the former), consequent on Railway-afforded facilities of transport, and also to the void necessarily caused by the diminution in Balumbha—a void which, but for the large stocks in hand at the opening of the year, would have been more distinctly noticeable.

54. In sugar, the increase has been no less than 59 per cent. in the quantity imported, and 65 per cent. in the duty paid. The general causes that stimulated the sugar trade during the past year (*vide* paragraph 43 to 45 General Review) were in full operation here; indeed, in consequence of the railroad *to* Agra and the metalled roads *from* Agra towards Jaipore on the one side, and Indore on the other, it was here that their effects were most conspicuous. As elsewhere, it is in refined sugar that increased facilities of transport produced the most marked results, as may be seen from the subnoted :—

Sugar.

Detail of Sugars (in Maunds) crossing the Agra Division.

Year.	Refined.	Unrefined.	Total.
1867-68	2,86,553	2,41,491	5,28,044
Corresponding 12 months of 1866-67	1,65,791	1,66,299	3,32,090
Ditto ditto 1865-66	1,70,618	2,48,219	4,18,837
Ditto ditto 1864-65	1,64,729	2,08,611	3,73,340

Detail of refined and unrefined.

Thus, while the exports of refined sugar are 68 per cent. ahead of those of *any* previous year, those of unrefined are a little *below* those of 1865-66. True, that as compared with 1866-67, there has been an increase, even in unrefined, of 45 per cent.; but 1867, with its scant sugar crop and impoverished Rajpootana consumers, is no fair subject for comparison, and looking to a series of years, it is obvious that, as might have been expected, it is chiefly in the more valuable kinds of sugar that increased facilities of transport and the general growth of trade have stimulated exports.

Miscellaneous.

55. Our miscellaneous revenue, fines, forfeitures, and the like, credited as receipts, at first, but later, for the most part, debited as charges when paid to the informers, captors of smugglers, &c., vary from year to year and need no special comments.

CHARGES.

56. The charges for the Agra Division for 1867-68, amounted to Rs. 1,92,085, which may thus be contrasted in detail with those of previous corresponding periods:—

Details compared with previous corresponding periods.

Detail of charges for the past and three preceding years.

YEAR.	Fixed.	Contingencies.	Petty constructions and repairs.	TOTAL.
	Rs.	Rs.	Rs.	Rs.
1867-68	1,79,560	7,293	5,232	1,92,085
Corresponding 12 months of 1866-67	1,83,570	6,020	3,410	1,93,000
Ditto ditto 1865-66	1,94,590	8,968	...	2,03,558
Ditto ditto 1864-65	1,84,115	5,399	...	1,89,514

The total, as will be seen, is less than in the two previous years. The variations in fixed charges during the above years, are due chiefly to non-payment of the late Commissioner's salary when he was on leave; its payment in a lump sum on his return, and the non-payment of any salary to Commissioner during the period that intervened between Mr. Money's departure and my assuming charge. Variation in the salary of officers, consequent on transfers and grade promotions, have also slightly affected the totals.

In contingencies, the fluctuations have been caused by the purchase of weighing machines in 1865-66, and the payment of a more than customary amount of travelling allowance to the Deputy Commissioner in the past year. As for petty constructions and repairs, it is only during the past year and part of the preceding, that they have been debited in our accounts, instead of being charged against the Department of Public Works.

NET REVENUE

57. The net receipts of the division for the past year, amounted to Rs. 30,85,663, which may be compared as follows with the net receipts of preceding corresponding periods:—

compared with those of previous years.

YEAR.	Gross realizations.	Charges.	Net Receipts.	Percentage of charges on gross realizations.
	Rs.	Rs.	Rs.	
1867-68	32,77,748	1,92,085	30,85,663	5·86
Corresponding 12 months of 1866-67	35,47,377	1,93,000	33,54,377	5·44
Ditto ditto 1865-66	30,10,652	2,03,558	28,07,094	6·76
Ditto ditto 1864-65	26,48,086	1,89,514	24,58,572	7·15

OF THE IMPERIAL CUSTOMS LINE FOR THE OFFICIAL YEAR 1867-68.

The percentage of charges on collection is higher than it would otherwise have been, on account of this division bearing the whole Head Quarter expenditure of the Line; on the other hand, it has received credit for 1¾ lakhs of duty paid on goods which really crossed the Muttra Line, and it bears no share of the expenditure on account of the Internal Department, to which it owes so much of its revenue; so that, as I have already repeatedly remarked, these percentages, so far as single divisions, or even sections of the Line are concerned, are rather matters of curiosity than utility.

COURSE OF TRADE.

58. There is one point connected with the course of the salt trade, that deserves especial notice, as proving that it was in the distant markets where eastern and other salts compete, that the high price of Balumbha chiefly affected the trade, and that in the consumption of the population immediately in rear of the Line, who have no alternative supplies to fall back on, there has been no diminution. Bichpooree is the post at which all salt intended for transmission by rail down country enters; at this post alone, the whole decrease has occurred. At every one of the other nine open posts of the division which supply local marts, and the country immediately in rear of the Line, there has been a more or less marked *increase*.

SMUGGLING.

59. There is no part of the Line on which smuggling was once more frequent or more injurious to our revenue, than in the Agra Division. Constant repressive measures have, however, gradually reduced it within narrow limits, and during the past year, successful attempts have been almost unheard of. The only Lines by which contraband goods used till recently to escape were by the Ootungun and Chumbul Rivers. Rafts made of ghurras, and loaded with salt, or even single ghurras, half full of salt, were launched in dark nights well above Line, allowed to float by themselves with the stream, and next morning, secured by confederates many miles below Line. To meet this manœuvre, we have now boats on the Ootungun and Chumbul; numerous seizures were effected in the former, five in the latter, and the practice has without doubt been checked; but for the Chumbul, a fast and thoroughly manageable boat is required, that which we now have being powerless at times to cope with the floods, and though we have failed to hear of such being the case, it is not impossible that during the rains, when the river is ¾ths of a mile wide and running like a mill sluice, some small quantity of salt may have escaped us.

PENAL ACTION OF THE DEPARTMENT.

Persons.

60. During the past year, altogether 474 persons (against 330 in 1866-67) were arrested by the departmental officers of the division, for breaches of the Customs' laws. Of these, 381 persons (against 263 in 1866-67) were released by the department on payment of, or giving security for single or double duty, or, in a few cases, on account of insufficiency of proof. The remainder were prosecuted, with what results may be seen from the subjoined table :—

No. of smugglers committed for trial.		No. of smugglers acquitted by the Courts.		No. of smugglers convicted by the Courts.		Percentage of convictions on committals.	
1866-67.	1867-68.	1866-67.	1867-68.	1866-67.	1867-68.	1866-67.	1867-68.
67	93	9	10	58	83	86·5	89·3

61. The penal action of the department has been fully discussed in the General and Sectional Reviews, and I need here, therefore, only add a few further divisional details. Of the 83 convictions, 14 paid fines of 1 Rupee a piece, and 69 underwent imprisonment, 35 of them for one month, and 34 for 15 days. It is easy to see that the sentences of the judicial tribunals contribute but little to deter offenders; it is to its own vigilance, rendering smuggling almost hopeless, that the department has chiefly to look for the protection of the Government revenue.

Goods.

62. Besides Court prosecutions, confiscations of 566 maunds of goods (chiefly salt), valued at about Rs. 750, and levy of double duty to the amount of Rs. 1,635, was enforced, on the recommendation of this department, by Commissioners of Revenue. Altogether, 488 recommendations were submitted, and of these, 484 were approved.

HEDGE.

63. The hedge, throughout this division, is, on the whole, in excellent order: for the greater portion of its length it is a nearly impregnable living fence, and where the nature of the soil and position of the Line in the midst of ravines, flooded during the rains, renders a green hedge impossible, a good dry one, for which sufficient material is available, is maintained. The hedge is, it is believed, in a much better condition than it has ever previously been, and I entertain no doubt that in a couple of years, it will, in this division at least, be as perfect as can be desired.

OFFICERS.

64. The Collector of this division, Mr. W. O. Bell, is one of the ablest officers in the department. His administration has, throughout the year, been most satisfactory and successful. Mr. Conroy, now Patrol of Bichpooree, is a very steady, and I believe, efficient officer, and both he and Mr. Monro, another old officer, at present Patrol of Futtehabad, deserve special favorable notice for their work during the year; though it must be confessed that the latter gentleman's report of that work is as little creditable to him as may be. Of the Assistants, Messrs. Whitten and Howard promise well; other officers have also done fairly well, but not sufficiently so to justify their special mention.

JHANSIE DIVISION.

JHANSIE DIVISION.

Line:

65. The Jhansie Division, the sixth of the Imperial Line and third and last of the North-Western Provinces Section of it, commences in the Etawah District, on the southern bank of the Chumbul, about 11 miles north-west of Jugumunpore, and terminates in the Lullutpore District, about 16 miles south of the town of that name.

its course.

66. It runs through Jugumunpore, Jaloun, Koonch, Ingwee, Erich, Chirgaon, Burragaon, Jhansie, Babeena, Talbehut, Bansee and Lullutpore, at each of which places a superior officer of the department is posted, and is altogether 168½ miles in length.

FINANCIAL RESULTS.
GROSS REALIZATIONS

67. The gross receipts of this division for 1867-68, amounted to Rs. 4,60,628, or somewhat less than 5½ per cent. below those for the preceding corresponding twelve months. This latter period here, as elsewhere, was one of unexampled prosperity for the salt trade, and if compared with other previous years, 1867-68 stands first on the list. Details of the chief items of income

in the past official, and three previous corresponding years, are exhibited in the following statement:—

Detail of gross realizations of the Jhansie Division.

Year.	Salt.	Sugar.	Miscellaneous.	Total.
	Rs.	Rs.	Rs.	Rs.
1867-68	3,67,301	91,196	2,131	4,60,628
Corresponding 12 months of 1866-67	4,12,790	73,189	1,019	4,86,998
Ditto ditto 1865-66	3,64,800	91,130	2,266	4,58,196
Ditto ditto 1864-65	3,67,994	75,262	5,897	4,49,153

compared with those of corresponding 12 monthly periods.

In salt alone is there any falling off, and in that only as compared with the exceptional period immediately preceding the past official year. The sugar revenue is far ahead of that of 1866-67, and is up to the highest level ever previously attained.

Salt.

Decrease.

68. The salt revenue of Jhansie has been influenced more or less by those general causes noticed in the General Review. Carriage had been cheap and abundant, and the roads unusually hard and dry, a matter of vital importance where the black soil predominates, and where, as in Jhansie, really heavy rains, such as we had in 1867-68, render half the country, including the main lines by which Sambhur comes in, impassable swamps: cotton too was dull. The result was that in 1866-67, an unparallelled import of salt took place, and an increase of more than 12 per cent. on the imports of any previous year occurred, without any new or improved channel of communication, or any development of area of distribution to absorb the unusual supply. The past year, therefore, opened in Jhansie, as in Delhi, with avowedly unprecedented stocks. The rains were of unusual severity and duration, half the Line in Jhansie being for months under water; carriage, as elsewhere explained, was much absorbed in agriculture, and although this produced less effect in Jhansie than higher up, so much of the trade being here carried by Bunjarahs, it too had its effect. Later, cotton rose and capital began to flow into that branch of trade, while simultaneously, the Bunjarahs were much taken up in the grain trade, there having been a great scarcity in Kotah and Malwa. That despite these depressing influences, the import of salt in 1867-68 equalled that of any previous year, with the exception of that immediately preceding it, points to a healthy development of the trade, peculiarly satisfactory in a tract of country in which scarcely any new outlets to distant marts have been opened.

69. Sambhur is the sole salt that crosses the Jhansie Division in any quantity, as will be seen from the subjoined:—

Detail in Maunds of Salts of different descriptions imported across the Jhansie Division.

Year.	Detail of Sorts.		Total.
	Sambhur.	Miscellaneous.	
1867-68	1,22,372	62	1,22,434
Corresponding 12 months of 1866-67 ...	1,37,251	345	1,37,596
Ditto ditto 1865-66 ...	1,21,223	377	1,21,600
Ditto ditto 1864-65 ...	1,21,798	867	1,22,665

Detail of different sorts imported.

The miscellaneous kinds that enter are a little Puchbuddra and a little Chootea from Gwalior, the latter an inferior earth salt, the staple which is most commonly attempted to be smuggled across the Jhansie Line.

Sugar.

70. The sugar trade in Jhansie shared in the general impetus that a good crop and the improved position of the mass of the consumers everywhere tended to give it, and yielded us a larger revenue in 1867-68 in Jhansie, than it has ever previously done. In quantity, however, the exports of 1867-68 fell somewhat short of those of 1865-66, owing to the proportion of raw sugar having been greater in this latter year. This will be seen from the following :—

Detail of Sugar (in Maunds) crossing the Jhansie Division.

Detail of raw and refined sugar.

Year.	Refined.	Unrefined.	Total.
1867-68	63,341	74,280	137,621
Corresponding 12 months of 1866-67 ...	52,430	55,357	1,07,787
Ditto ditto of 1865-66 ...	62,222	77,088	1,39,310
Ditto ditto of 1864-65 ...	50,623	65,704	1,16,327

As elsewhere, therefore, it is in the more valuable article, weight for weight, that the increase has been greatest ; although this is necessarily less marked in Jhansie, where so much of the trade is in the hands of Bunjarahs.

Miscellaneous.

71. Our miscellaneous revenue, always small, consists of fines and forfeitures, credited as receipts, and debited under charges, when distributed to informers, captors of smugglers, and the like. Minor fluctuations in items of this description call for no comments.

CHARGES

72. The gross charges of the Jhansie Division amounted to Rs. 1,73,826, or within Rs. 10 of those for the previous corresponding 12 months. In the details, however, there have been greater differences, as will be seen below :—

Detail of charges for the past and three preceding years.

Details compared with those of preceding years.

Year.	Fixed.	Contingencies.	Petty constructions and repairs.	Total.
	Rs.	Rs.	Rs.	Rs.
1867-68	1,65,743	4,089	3,994	1,73,826
Corresponding 12 months of 1866-67	1,66,863	4,761	2,192	1,73,816
Ditto ditto of 1865-66 ..	1,60,610	4,658	...	1,65,268
Ditto ditto of 1864-65 ...	1,61,136	6,155	...	1,67,291

The increase in fixed charges in 1866-67, as compared with previous years, was due to enhanced rates of pay to Assistant Patrols, under the revised scale, and to several Patrols becoming entitled to their grade promotion. The decrease under the same head in the past year, is due to a reduction of four jemadars and 28 chuprassies, consequent on the rectification of the Line at

Koonch, and to the transfer from the division, on promotion, of certain 1st class assistants, who were replaced by 2nd class assistants, drawing, of course, lower salaries.

73. In 1864-65, contingencies amounted to over Rs. 6,000, but this was because, in that year, smuggling was first energetically repressed in this division, and fines and forfeitures (*vide* Miscellaneous Revenue for that year) rose to nearly Rs. 5,900. These payments to informers, &c., of sums already brought to credit, are a mere nominal charge and always form the bulk of our contingencies. *Bonâ fide* contingencies, notwithstanding service labels, and full pay to sick chuprassies in hospital, are kept within very narrow limits. As for petty constructions and repairs prior to 1866-67, these were charged against the Department Public Works, and not, as during part of that year and the whole of 1867-68, debited in our accounts.

NET REVENUE.

74. The net receipts of the Jhansie Division for 1867-68, amounted to Rs. 2,86,802, or more than 8 per cent. below those for the preceding year, though much the same as those for other past years, as will be seen in the subnoted table :—

Year.	Gross realizations.	Charges.	Net Receipts.	Percentage of charges on gross realizations.
	Rs.	Rs.	Rs.	Rs.
1867-68	4,60,628	1,73,826	2,86,802	36·43
Corresponding 12 months of 1866-67	4,86,998	1,73,816	3,13,182	35·69
Ditto ditto 1865-66	4,58,196	1,65,268	2,92,928	36·06
Ditto ditto 1864-65	4,49,153	1,67,291	2,81,862	37·24

Percentage of charges on collections.

With Jhansie commence what may be called the preventive divisions of the Line. These confine the salt and sugar trade to its great natural lines of traffic across the Delhi, Muttra and Agra Divisions, which, but for the barrier thus presented, it would abandon to avoid the payment of duty.

The percentage, therefore, of costs on collections in this, as in other isolated divisions, affords no criterion as to the value of this portion of the Line to the State. I have already dwelt at length upon this question in the *General Review* (paras. 56, 57), and need not here revert to it.

COURSE OF TRADE.
Salt.

75. The general set of the salt trade, towards the Jhansie Line, is across the Jaipore and Gwalior States; some passes through Kerowlee, some through Dholpore, and some even appears to go through Tonk. Much seems to rendezvous at Dutteah. The Gwalior administration promises to hamper this trade materially, and once a Railway is made to Sambhur, I shall expect salt to run down the Doab to the Puhpoondh Road-station (East Indian Railway) and thence take cart to Jhansie. Besides the Re. 1 per bullock load, levied as a transit due, for some time past, by the Gwalior State, there has recently been a further due of annas 6 per bullock load, levied at the Raksa Chowkee, some 7 miles from Jhansie. This may be only a beginning; these dues may be indefinitely increased, and it would cause me serious anxiety did I not foresee that even if railroads fail to obviate the evil, we shall have in our own hands the remedy already alluded to in para. 95 *General Review.*

76. Of sugar little can be said; Cawnpore supplies the major portion of the Jhansie sugar, but we are not now in a position to gauge the proportions in which the different producing localities furnish that supply to Cawnpore. Next year I shall be able, I hope, to deal with all such questions more satisfactorily.

SMUGGLING.

77. Of all the comparatively old divisions, Jhansie is that in which smuggling is the most difficult to check. Close proximity of important depôts in Native states, an imperfect hedge, physical facilities afforded to smuggling by the wild nature of much of the country traversed by our Line, and special local difficulties in the way of obtaining reasonably efficient men on the present scale of pay, all combine to give illicit trade here a support that it finds nowhere else in the Punjab or North-Western Provinces Section. During the past year, smuggling has not increased in the upper portion of the division, but in the lower portion, towards Lullutpore, I think it certainly has. This increase is due mainly to the partial failure of the rubbee crops and consequent high price of grain in the neighbourhood. The local officer, Mr. Dutton, is one of the most efficient on the Line, and what any officer could achieve with the means at his command, he has, I think, done, but till we get up a thoroughly good hedge and give our men better pay, smuggling will never be quite put down here.

PENAL ACTION OF THE DEPARTMENT.
Persons.

78. Altogether, 611 persons were arrested as smugglers, in the Jhansie Division, during 1867-68, against 599 in the previous 12 months. Of these 611, 481 were released by the department on payment of single or double duty, on account of their having only small quantities, not exceeding 10lbs, in their possession, being travellers or the like, against 492 released in the previous year. The remainder were prosecuted, and were thus disposed of:—

Number of smugglers committed.		Number acquitted by the Courts.		Number convicted by the Courts.		Percentage of convictions on committals.	
1866-67.	1867-68.	1866-67.	1867-68.	1866-67.	1867-68.	1866-67.	1867-68.
107	127	6	14	101	110	94·4	86·6

The percentage of convictions, high as it is, has fallen off, but I cannot honestly say, from what I have seen of the cases, that our officers were to blame. Witnesses vary their statements before different tribunals, and officers of different departments take different views of the merits of cases, and so long as the percentage of acquittals is less than 15 per cent., little need be said, although, as a whole, taking one division with another, our acquittals do not reach half that percentage.

Turning now to the 110 persons convicted, we find that 8 paid fines, aggregating Rs. 95, and 102 were imprisoned, one for 10 days, and the remainder (101) for 2 months each.

Goods.

79. Besides these prosecutions in the Criminal Courts, the confiscation of 238 maunds of goods (chiefly salt) valued at Rs. 350, and the levy of double duty to the amount of Rs. 41, was enforced by the Revenue Commissioner on the recommendation of the Collector. Three hundred and ninety-nine such recommendations were submitted, of which 396 were approved, and three disallowed.

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HEDGE.

80. The hedge in this division has not, I think, been sufficiently attended to in former years. Notwithstanding all that has been said about it during the past year, Mr. McGowan does not even *notice* the subject in his annual report. Considering that this is the worst division for smuggling in either the Punjab or the North-Western Provinces; that a good hedge is more urgently required here than almost anywhere else, and that, as a whole, the hedge is worse here than in any other of the old divisions, Sirsa excepted, this neglect of his is reprehensible. Still his subordinates have been working, some of them very hard, and the hedge has undoubtedly progressed during the past year. At present there is not a proper live hedge in one-fifth of the division, but in fully three-fifths there is a line of healthy young plants which in three years ought to consolidate into an impenetrable barrier. On the remaining two-fifths a variety of experiments will be tried during the coming rainy season. In one or two spots, where material for a dry hedge is wanting and a live one cannot be got up without heavy expenditure, it is proposed to try loose stone walls, materials for which in unlimited quantities are on the spot. Throughout the division there is a dry hedge, and this in more than three-fifths is at this *present moment*, it is believed, in very fair order. It has *not* been so, but it is said to be so *now*. In the remainder of the division, work is still going on, but growing scarcity of material, and increasing unwillingness of landed proprietors in some localities, to permit our men to use what material exists, renders it more and more necessary that, wherever it is possible, a good live hedge should be reared and maintained, and that where such is not possible we should rear our own material for a dry hedge on suitable adjacent plots, or lastly, where nothing will grow any where near, that we should, by stone walls or scarped earthen cliffs, bar the passage of illicit trade. This has to be done, and will, it is believed, *be* done. Further remarks are at present needless.

OFFICERS.

81. The Collector, Mr. McGowan, is an old and experienced servant of Government. I have every confidence in him as a discreet and reliable officer, but he is, I fear, wanting in energy and activity. He has, since the year closed, obtained seven months' sick leave, and it is to be hoped that, on his return, he will move more about his division, and both work harder himself, and see that *all* his subordinates similarly do their duty thoroughly. Of subordinate officials, Mr. Dutton, the Patrol of Talbehut, deserves special and prominent notice. As far as I have yet been able to judge, he is one of the best Line officers I have. Mr. MacMullen, Patrol of Chirgaon, has also worked very satisfactorily.

ALLAN HUME,
Commissioner of Imperial Customs.

Appendix III.

Review of the Administration of the Central Provinces' Section of the Imperial Customs Line for the official year 1867-68.

C. P. SECTION. IMPERIAL LINE.

The Central Provinces' Section of the Imperial Line at present commences in the Lullutpore* district, about 2¼ miles north of Goonah.

its course.

In its course it traverses portions of Lullutpore, Saugor, Nursingpore, Hoshungabad, Nimar, Baitool, Chindwara, Nagpore, Wurdah, Chanda, Raipore, and Sumbulpore, terminating at the present time at Sama Singha on the Bamra frontier, some 36 miles from Sumbulpore on the Ranchee road.

2. It passes close to the cities of Saugor and Hoshungabad; from Paloha in Nursingpore closely follows the course of the Nerbudda to near the borders of Nimar; thence turns southward to Boorhanpore, where the Jubbulpore branch of the G. I. P. crosses it; again turns due east, hugging the frontier of Berar as closely as the nature of the country will permit, to Kowta or Phoolgaon, where the Nagpore railway crosses it, and so on by the Wurdah and Waingunga valleys to Chanda and Dhaba; here it again turns northward by Wyragurh, joining the main road at Arung, which it thence follows to Sumbulpore.

Length.

3. This Section is 1,200 miles in length, and for 520 miles of this the Line is a mere skeleton, with posts from 6 to 16 miles apart. Four divisions, *viz.*, those of Saugor, Hoshungabad, Nagpore (or Wurdah) and Raipore (or Chutteesgurh), the Headquarters of whose Collectors are located at these several towns, are included in this Section, to which are attached 12 Patrols and 23 Assistants. A separate review of the administration of each division will follow, and I shall therefore here chiefly confine myself to provincial results.

FINANCIAL RESULTS.
GROSS REALIZATIONS.

4. The gross realizations of the Central Provinces' Section of the Imperial Line amounted in 1867-68 to Rs. 17,74,416, being somewhat less than 10½ per cent. in excess of those of the preceding official year, which, however, comprised only 11 months. Contrasted with the realizations of the preceding corresponding 12 months there has been a falling-off in the past year of more than 5½ per cent.

5. In the following table the collections under each great head, as well as the total realizations of the two past official years, and of the three corresponding 12 monthly periods immediately preceding 1867-68, are compared :—

Detail of gross realizations for the Central Provinces.

Details compared with those of previous years.

Year.	Salt.	Sugar.	Miscellaneous.	Total.
	Rs.	Rs.	Rs.	Rs.
1867-68	16,73,858	66,517	34,041	17,74,416
1866-67 (11 months)	15,32,513	49,019	24,995	16,06,527
Corresponding 12 months of 1866-67 ...	17,88,457	65,348	27,539	18,81,344
Do. do. 1865-66 ...	15,86,673	82,576	20,935	16,90,184
Do. do. 1864-65 ...	9,11,941	68,436	10,343	9,90,720

* Applications have been separately made to the Governments of the North-Western Provinces and Central Provinces to sanction such changes as may be necessary to make our divisional limits conterminous with the provincial jurisdictions.

6. The rapid and enormous increase of revenue from 1864-65 to 1866-67 is easily explained. Until this latter year, the Central Provinces' Section, as it now stands, cannot be said to have been fairly at work. It was only in January 1865 that we laid down the Nagpore Line in supercession of the local Wurdah valley Line, till then supervised by the district authorities. It was not till *May* 1865 that the contract for the levy of salt duty in the Chutteesgurh country having expired, we laid down the Raipore Line, and here the contractor had, by allowing a discount on the authorized duty during the later months of his lease, so overstocked the country in rear of the Line that the first 12 months did not yield one-half of the normal revenue. Lastly, it was not till January 1866, that we shifted our course from the Seonee and Chichowlee Line, and absorbing the Nimar Local Line ran round by Khundwa and Hoshungabad.

Salt.

7. It is, therefore, only with the 12 months that immediately preceded it, that we can profitably compare the realizations of the past official year, and so compared, it appears, that while in sugar there has been a trifling increase of less than 2 per cent., in salt there has been a decrease of nearly 6½ per cent.

Decrease.

8. The whole, however, of this decrease, is not due to a diminution of imports. A portion is consequent on a change in the proportions of the kinds of salt imported, 50,809 maunds of half duty-paying salt having displaced an equal quantity of full-duty-paying salt, thereby causing a decrease in our realizations of Rs. 75,000.

Half-duty paying salt.

9. Now, if we could be certain that this decrease was nominal, that where we lost, Bombay gained, and the result to the empire remained unaffected, it might scarcely be necessary to say more on this matter. But the reverse is the case. I have every reason to fear that *we* lose without any equivalent gain to *Bombay*, and that there is a yearly increasing loss to the empire at large. I beg most distinctly to premise that I am in no way presuming to find fault with the Bombay Customs' arrangements; it is to be supposed that they are as perfect as local circumstances will permit, but the fact remains, that they offer but trifling obstacles to salt smuggling, and that the conviction (after local enquiries and a visit to some of the more important salt works) is to my mind irresistible, that a very considerable proportion of the salt now imported into the Central Provinces and Berar as having paid duty at Bombay has never paid duty there at all. Above 4 lakhs of maunds were this year thus imported, and the question is one which, as the imports yearly increase, becomes yearly more and more important. I do not doubt that within 12 months of the opening of the G. I. P. line through to Jubbulpore the import of Kokan will rise to close upon double its present figure, and I therefore entreat the most earnest and immediate attention of Government to this matter.

Much has probably never paid duty at Bombay.

Insufficiency of Bombay checks.

10. I wish to say as little of Bombay as possible, because undesirable as the present state of affairs there may appear, it is to be presumed that local peculiarities prevent improvement, which would otherwise doubtless have long since been effected. On the other hand, I am in my own mind satisfied that the Imperial Line revenue is suffering heavily at present, and is likely to suffer still more heavily as time goes on, and I cannot, therefore, avoid recording the results of my own personal observations and enquiries. At Bombay itself every enquiry resulted in the same reply, *viz.*, that the checks against salt smuggling were virtually inoperative, that half the salt consumed in Bombay was smuggled,

and that throughout the past year good salt was procurable in Bombay at 1 anna a maund *below* the mere duty rate it was supposed to have paid. When I visited the Oorun works, the absence of effectual preventive measures was self-obvious, and all the officials of the Department, that I had the pleasure of meeting at the works in Bombay and elsewhere, admitted that smuggling was *rampant*. It is probably impossible, under the present Bombay system, to hope for better results, but *we* can at least prevent smuggled salt from crossing *our* Line at half duty rates. I solicit permission (after one month's notice) to charge full duty on all salt crossing our Line, or presented for transmission by rail across our Line, that is not covered by a regular pass signed and sealed by the Government official to whom the Rs. 1-8 duty was paid, certifying such payment, and noting the amount of the despatch, the name of the owners, and other particulars which need not here be dwelt on. *Further*, in order to make sure that the greatest care is exercised in the issue of these rowannahs, to prevent forgeries, alterations and the like, by traders, I request that on the return by us to Bombay of such rowannahs or passes, the Customs' Department there be directed to credit us by transfer with the amount of duty represented by such rowannahs. I believe that by this method alone the interests of the State can be effectually protected, and I trust I shall not be thought to have overestimated the very great necessity that exists for immediate action in the matter.

Rule to be adopted in regard to half-duty Bombay salt:

11. Not only, however, in regard to Bombay salt would I enforce this rule, it is equally necessary where the so-called Bunwar salt, imported *vid* the Raipore Division, is concerned, and much of which, there is every reason to think, is smuggled or illicitly manufactured salt. The rule should be general: no salt admitted without payment of full duty, except on production of a pass proving the payment to some competent authority of half-duty; such authority on the return by us of passes so produced to be directed to credit this Department with the amount of duty represented by such passes. I shall be surprised if the adoption of this rule does not benefit the Imperial Exchequer even now to the extent of fully 3 lakhs of Rupees, and the prospective loss that it may be expected to prevent is at present beyond calculation—certainly more than double this sum. Import of half duty-paying salt of all kinds amounts even now to 6 lakhs of maunds, and may be expected to reach 10 lakhs within three years, and the danger to be guarded against is therefore of no ordinary dimensions.

and in regard to all salts claiming reduction of duty on the score of payments elsewhere.

12. Besides the diminution of revenue, due to an increase of 50,000 maunds in the quantity of half duty-paying salt, there is an actual decrease of something like 28,400 maunds in the quantity of salt imported, the whole of which I believe to be due to smuggling in one form or another. Petty smuggling has been very rife in the Saugor Division (*vide* paragraph 68). A sudden diminution of supply, due to a stoppage in the Bunjarah traffic, discussed in the Divisional Review, caused a great rise of price in salt in the tract between the Puchmurree hills and the Line, which, coupled with the peculiar physical difficulties there opposed to preventive operations, gave a great impetus to illicit trade. An extra 2,000 maunds I estimate may have been there smuggled. In Raipore again, where half the Line is weak to a degree, and the other half a mere skeleton, smuggling, as fully explained in the Divisional Review (paragraph 126), has assumed formidable dimensions, and will, unless the measures elsewhere recommended

Increase in illicit trade has contributed to the decrease in revenue.

to strengthen the Line are adopted, unquestionably seriously affect our revenue. The Line is so weak that it offers the greatest temptation to smuggling, and even the heavy confiscations of goods and cattle, that have been enforced in the few cases in which we were fortunate enough to effect seizures, are insufficient to deter, whilst the chance of capture necessarily remains so small. I cannot place the total amount smuggled in this division during the year at *less* than 14,000 maunds, of which I believe fully $\frac{1}{3}$rd to be in excess of what during the previous year evaded payment of duty. This is necessarily a mere estimate, founded on the opinions of the Local Officers as to the proportion of detections to escapes, and the personal observations of the Deputy Commissioner; but I much fear that it is rather below, than above the truth.

The chief source of decrease being in the deflection of trade round our terminus.

13. By far the greatest source of loss, however, to which we owe, I believe, nearly $\frac{3}{4}$ths of our decrease, is the systematic manner in which our terminus is rounded by bodies of Bunjarahs, who now supply direct tracts of country which formerly drew a portion of their supplies across the Chutteesgurh country. From its first establishment, the Line has been rounded, but the success attending the earlier ventures and the grazing tax (in many districts so obnoxious to the Bunjarahs) are, it is believed, deflecting more and more of the trade to this route.

14. I shall notice these subjects further on. Having now generally explained the decrease, I proceed to consider the degree in which the collections of the different divisions have been affected. The following table exhibits the salt revenue of these for the past and previous years :—

Salt.

Fluctuations in the several Divisions.

Year.	Saugor.	Hoshungabad.	Nagpore.	Raipore.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.
1867-68	7,71,722	97,827	5,31,147	2,72,862	16,73,858
Corresponding 12 months of 1866-67 ...	9,26,910	1,31,770	4,13,142	3,16,635	17,88,457
Do. do. of 1865-66 ...	8,67,515	1,06,743	4,92,472	1,19,943	15,86,673
Do. do. of 1864-65 ...	6,96,756	2,15,185	.....	.....	9,11,941

It will be seen that Nagpore alone has a large increase. The fact is, rail-borne Kokan (the whole duty on which is brought to credit in the Nagpore Division) has displaced Sambhur and Kansia, the chief imports of Saugor and Hoshungabad. Taking these three divisions together, there has been no decrease. True, the deficit in the two latter is Rs. 1,89,000, and the increase in Nagpore only Rs. 1,18,000, but if we give the latter credit for the half duty on the extra 80,000 maunds of Kokan salt imported by it during the past, as compared with the previous year, there has been an actual increase. Taking these three divisions the imports have been 6,49,000 maunds during the past, against 6,39,000 maunds in the preceding 12 months. It is to Raipore that the whole decrease is due, and though a portion of this is consequent on the imports of this division in 1866-67 having been, as explained in the Divisional Review, above average, of Kokan, having made a slight eastward movement, and on smuggling having enlarged its operations on the borders of Raipore, the chief cause of the decrease is, I believe, the result of an increasing deflection of Bunjarah traffic round our terminus.

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15. Turning to the subjoined table of the different descriptions of salts imported, the same facts strike us:— *Detail of salts imported.*

Year.	Sambhur.	Kansia, or Puchbuddra.	Kokan.	Burragura.	Bhooskie.	Bunwar.	Miscellaneous.	Total.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
1867-68	38,664	2,41,155	3,61,524	4,018	4,101	1,81,908	8	8,31,678
Corresponding 12 months of 1866-67.	55,514	2,75,220	2,81,533	15,139	11,533	2,11,080	6	8,50,035
Do. do. of 1865-66 ...	54,801	2,67,602	2,82,731	2,579	24,633	75,869	1,263	7,09,478
Do. do. of 1864-65 ...	35,886	2,37,507	18,553	949	20,823	...	14	3,13,532

The decrease in the imports of Sambhur, Kansia, Burragura, and Bhooskie salts, that cross the Saugor and Hoshungabad Lines, is exactly met by the increase in Kokan. The whole real decrease in the imports is in the Bunwar that crosses the Raipore Line, exclusively. Of the decrease in the various sorts first enumerated, nothing further need here be said, than that the superior cheapness of Bombay salt is driving them, superior in quality though some of them unquestionably are, out of the consumption of the masses.

16. In sugar a small increase, as compared with the preceding 12 months, is observable, but even with this increase the revenue from this source falls somewhat short of that for 1864-65, and something like 20 per cent. below that for 1865-66. The explanation is obvious; while Mirzapore sugars still had to creep by devious and difficult routes in country carts to the distant marts that lie beyond our Line, here, Bombay sugars, with all the facilities of transport by rail, drove them as that rail opened further and further back. As if this advantage were insufficient, these sugars, *British* produce, being re-exported across our Line, directly into foreign territory for consumption by the subjects of Native States, were inadvertently suffered to pass free to the extent of some 3,000 maunds a month, while we exacted the full duty on Mirzapore sugars, taking precisely the same line and passing the same posts. This manifest injustice I have remedied. The orders of the Government of India apply equally to all British, and in fact all saccharine produce exported across our Line into foreign States, and the distinction drawn by the Local Officers converted our duty into a *protective* one for one description of British produce at the expense of all other descriptions. The tide of railway facilities is now beginning to turn. Already the rail is open to Jubbulpore, and during the short time that elapsed between this event and the close of the year, more than 4,000 maunds had come down by this route. The completion of the rail will give an extraordinary impetus to the sugar trade of the eastern marts, and as Bombay sugars cannot, as far as we are now informed, stop short at Bhoosawul, and run up through Holkar's territory outside our Line, as cheaply as they can come by rail to Hurda and Hoshungabad, and so after paying our duty cross into Bhopal, &c., even when scant crops and high prices dwarf temporarily the eastern trade, we shall still realize our revenue from Bombay, if not from Mirzapore sugar, and this revenue will, unless I am mistaken, show a very material increase before the close of next year.

Fluctuations in the Exports of the several Divisions.

17. The following table exhibits the exports separately in each year of the several divisions comprised in this section of the Line:—

Sugar.

Year.	Saugor.	Hoshungabad.	Nagpore.	Raipore.	Total.
	Mds.	Mds.	Mds.	Mds.	Mds.
1867-68	42,201	12,981	10,881	454	66,517
Corresponding 12 months of 1866-67	43,776	9,044	12,140	388	65,348
Do. do. 1865-66	48,593	16,410	17,254	319	82,576
Do. do. 1864-65	58,900	9,536	.....	.....	68,436

Saugor is at present the division in which the largest revenue is realized, but had Bombay sugars, being exported into foreign territory, *viâ* Khundwa, &c., across our Line, been made, as they ought, to pay duty, the sugar revenue of Hoshungabad would have equalled that of Saugor. This extraordinary oversight of the Local Officers was only discovered by the Deputy Commissioner during the cold weather. The matter was at once reported demi-officially to the late Chief Commissioner, but he, considering the whole levy of the sugar duty illegal, declined to allow any sort of extension of a system which he pressed the Department to discontinue. Investigation having shown that the orders of the Government of India, authorizing the levy of the sugar duties, were covered by the Indian Council Act, and those orders a sufficient warrant for this Department's action remaining uncancelled, I ultimately, reporting the same to the Officiating Chief Commissioner, took upon myself the responsibility of enforcing those orders impartially in regard to all sugars, whether eastern or western. I may note that the export trade in sugar in the Raipore Division is merely nominal.

Proportion of refined and raw sugars exported.

18. In the subjoined table are exhibited the proportions in which raw and refined sugars respectively have contributed to our revenue during the past and preceding years:—

Year.	Refined.	Unrefined.	Total.
	Mds.	Mds.	Mds.
1867-68...	61,458	13,491	74,949
Corresponding 12 months of 1866-67...	59,509	15,571	75,080
Do. do. 1865-66...	77,778	12,795	90,573
Do. do. 1864-65 ,..	65,563	7,661	73,224

At present it is only in the upper $\frac{2}{3}$rds of the Saugor Division that unrefined sugar is taxed. At the Paloha, Saen Khera, and Omerdha posts, transferred in 1867 from the Hoshungabad Division, raw sugar passes free, and it is a remarkable proof of how little impediment our light 6 annas a maund duty causes to trade, that with these posts distant from them but a short distance, the traders still pay duty on, and pass hundreds of maunds yearly of goor, at the closed posts immediately above them.

Necessity of reconsidering the question of taxing raw sugar.

19. The whole question of taxing raw saccharine produce in the Central Provinces must be reconsidered, the opening of the rail having altogether altered the state of affairs. When Sir R. Temple declined to tax goor exported across the lower divisions of his jurisdiction, the trade in this article was confined to local produce. Sugar cultivation in the Central Provinces was in its infancy, and the imposition of any duty might have checked culture. The opening of the rail will now bring down unrefined as well as refined sugars from the eastern marts, and

it is impossible, consistently, to omit levying the usual export duty on these. In principle, to tax these and leave the produce of the Central Provinces free, which would constitute a protection to these latter, would, I think, be of questionable propriety. In practice it would be objectionable in the highest degree, and lead to interminable and complicated disputes. Raw sugars are not so easily separable as salts, and a little judicious manipulation and intermixture would, and does, prevent the possibility of making sure of the source from which they have been derived. I earnestly recommend that from the 1st January 1869, the usual duty be levied on raw sugars exported from the Central Provinces not only at the three last posts of the Saugor Division, but throughout the Central Provinces. The mass of raw sugars exported will before long be the produce of those same tracts, which supply the Agra and Jhansie Divisions, and it would be inequitable, and I confess it seems to me irrational, to tax the same class of sugar when it goes by rail to Agra, and thence crosses into Rajpootana, and not to tax it when, taking another line of rail, it crosses by Hoshungabad.

Miscellaneous.

20. The miscellaneous receipts consist almost exclusively of fines, proceeds of confiscated salt, and the like; items which, although as a matter of account, always credited as income, are all disbursed, sooner or later, to informers or the establishment, and debited under contingent charges. Fluctuations under this head, dependent on the extent of seizures in any year, need no further comment. Both in Saugor and Raipore there has been an increase both of smuggling, and therefore of seizures, and hence the general increase observable under this head.

CHARGES.

21. The gross charges for the past year for the Central Provinces' section of the line amounted to Rs. 4,67,976, a sum slightly in excess of those for the preceding 12 months. In the following table these charges in the past and previous years are compared under each great head:—

Details compared with those of previous years.

Year.	Fixed.	Contingencies.	Petty constructions and repairs.	Total.
	Rs.	Rs.	Rs.	Rs.
1867-68 ...	3,84,231	78,554	5,191	4,67,976
Corresponding 12 months of 1866-67 ...	3,74,826	74,905	2,908	4,52,639
Do. do. 1865-66 ...	3,36,152	65,922	1,320	4,03,394
Do. do. 1864-65 ...	1,83,481	15,478	.....	1,98,959

22. The increase in earlier years is due to extension of Line; the Nagpore Division opened in January 1865, the Raipore in May 1865. The Nimar extension took place in January 1866. So in the past year the establishment of the Kullian and Boree Bunder posts, and the Nagpore station sugar post (*Tulashee chokie*), has again increased the fixed charges. In contingencies the increase is only one of account; in real contingent expenses, which the State pays for, there has been considerable decrease, but the nominal amount has been swelled by an increase in fines, and seizure proceeds, distributed to informers and to the men.

NET REVENUE.

23. The net receipts for the past year amounted to Rs. 13,06,441, a sum which, for reasons already explained,

falls (*vide* the subjoined table) considerably short of those for the 12 months immediately preceding it:—

Percentage of costs on collections.

Year.	Gross Collections.	Charges.	Net Receipts.	Percentage of charges on gross collections.
	Rs.	Rs.	Rs.	
1867-68 ...	17,74,417	4,67,976	13,06,441	26·37
Corresponding 12 months of 1866-67 ...	18,81,345	4,52,639	14,28,706	24·59
Do. do. 1865-66 ...	16,90,184	4,04,394	12,85,790	23·92
Do. do. 1864-65 ...	9,90,720	1,98,959	7,91,761	20·08

24. The percentage of costs on collection *viz.*, 26·37 contrasts strongly with that of the North-West Provinces, which is only 8·72, but as usual no conclusions can be safely drawn from these isolated percentages. As a matter of fact, the North-West Provinces owes fully ⅓rd of its revenue to the Central Provinces' Line, and how much Bengal revenue would disappear with the abolition of this Line no one is in a position to pronounce.

Financial results of the Imperial organization of the Line compared with those of the old local Lines.

25. When on the subject of net receipts I must record my opinion that the returns from the Central Provinces' section have not yet been as satisfactory as might have been hoped for. If we revert to the time of the old Local Lines and compare the net receipts now and then, the progress that we have made is by no means what it should have been. Let us take 1863-64: in this year the receipts, &c., of the Central Provinces appear to have been as follow:—

Line.	Expenditure.	Receipts.
Saugor, Imperial ...	1,08,704	7,60,370
Seonee, ditto ...	98,928	99,605
Nursingpore, Local ..	2,616	5,369
Baitool, do. ...	2,402	37,445
Hoshungabad, do. ...	5,604	88,481
Chindwara, do. ...	3,074	36,232
Nagpore, do. ...	5,694	48,649
Wurdah, do. ...	7,182	1,83,136
Chanda, do. ...	2,712	36,708
Chutteesgurh Lease ...	*Nil*	1,25,000
Total Rs. ...	2,36,916	14,20,995

26. This gives a net return of Rs. 11,84,079, against Rs. 14,28,706 in the 12 months of 1866-67, and only Rs. 13,06,441 in 1867-68; *our* Central Provinces' financial gain therefore was only Rs. 1,22,362 in the latter, and Rs. 2,44,627 in the former year. The Imperial financial gains, however, are somewhat greater, the import of Kokan in 1863-64 was under 2 lakhs of maunds, in 1866-67 it amounted to 2,81,000 maunds, and in the past year to 3,61,000 maunds. This increase of imports of 81,000 and 1,61,000 maunds signifies our increase in Bombay revenue (at any rate if they levy the duty they are supposed to do) of Rs. 1,21,500, and Rs. 2,41,500, which, added to the sums above noted, give the net Imperial financial gain consequent on the Imperial organization of the Line as Rs. 3,66,127 for 1866-67, and Rs. 3,63,862 for the past year. Considering the development of trade consequent on the opening of the railway and the improved administration of the provinces this scarcely satisfies me. Doubtless there have been the administrative advantages of relieving the already over-worked district and superior revenue officers of the labor

of supervision and of bringing supposed offenders against the law before tribunals presided over by officials entirely disconnected with the Customs, &c., &c. It is true, too, that the Imperial organization of the Line is still in its infancy; that we have had temporary depressing causes, widely spread bankruptcies, and the like to contend with during our short career; but still with every allowance, I feel convinced that Government has not as yet reaped anything like the advantage, even pecuniarily, that may be fairly expected from our systematic organization. Gross and patent defects, such as the Nundgaon 10-mile gap in the Line, discovered during the past season's inspection, have been separately reported to the Chief Commissioner, and will, doubtless, before long be rectified under his orders, but the two great sources of loss have yet to be dealt with.

Two great obstacles to the development of the revenue.

27. First the Raipore Line, as now constituted, half with 6 and half with 3-mile posts, is untenable. Formidable as is the amount of smuggling there at the present time, it is nothing to what we may expect as time goes on; a minute and careful inspection of the Line has this year been made by the Deputy Commissioner, and he is convinced that nothing less than 2-mile posts as an average, (in some places rather closer, in some rather further apart) will at all meet the requirements of the locality. This will entail the addition of 57 posts to the Line, (supposing it shortened as we have recommended by shifting the terminus to Jhoojoomera), and will cost, including Jemadars, &c., Rs. 15,000 a year. This absolutely must be done if the revenue of this division is to be either preserved or improved. It will be a sheer waste of money as time goes on, and the Bunjarahs get more and more aware of the impossibility of the establishment on its present footing practically barring their transit to keep the present Line up. I have dwelt further on this subject in the Raipore Divisional Review, and shall therefore now turn to the other and still more important cause of loss.

Weakness of the Raipore Line, which must be strengthened.

Termination of the Line at Sama Singha.

28. This latter is of Imperial importance, and has already been touched on in the General Review (para. 11), but must here, on account of its great importance to the Central Provinces, be more fully considered. The Line ending at Sama Singha (the same will be the case even with the improved terminus at Jhoojoomera) leaves a wide gap between this latter place and the sea, and through this, vast quantities (locally estimated at incredible amounts, but which, under no conceivable circumstances, can be less than a lakh of maunds a year) pass up to the tributary mehals, Chota Nagpore, and even at times to Belaspoor. This salt is partly (and of this, I believe there is no doubt) illicitly manufactured in the neighbourhood of the Chilka Lake on the Madras Coast, and the rest is low-dutied Madras salt. Yearly the route round our terminus by Bamra is becoming more and more frequented. There was a considerable trade between Ranchee and Sumbulpore; country produce came down, salt went up. This trade is all but extinct. During the past year at least 20,000 maunds, that during the preceding year would have gone across our Line, went round it by Bamra. It is not only that this free salt deflects westward towards Belaspore, and so is commencing to occupy area in our own provinces heretofore supplied direct across the Line, but that tracts of country outside our limits, formerly supplied through Chutteesgurh, are drawing their whole supplies through the tributary mehals.

29. There is no question I think that we absolutely require to continue our Line down to the sea. Our present Line might

Urgent necessity of prolonging the Line to the Sea.

be brought down to Sonpoor: (by a little judicious management the Chief could be got to agree to that,) and thence down the southern bank of the Mahanuddy to somewhere between Kundpara and Bankeegurh, and thence to the sea, keeping as much Bengal territory as possible (consistent with keeping the Chilka Lake *outside*) inside the Line. Such a Line to be efficient, including all supervision, &c., has been estimated to cost about Rs. 1,20,000 a year. The gain to the Central Provinces would unquestionably *be great*, but to Bengal far greater. I cannot pursue the subject further here, but it may be accepted as a certainty, that while the reorganization of the Raipore Line will unquestionably do something, the Central Provinces will never reap the full benefit of the Imperial organization of the Line, until that Line extends unbroken to the sea.

COURSE OF TRADE.
SALT.
Kokan.

Rail-borne Kokan is displacing Bunjarah-carried Rajpootana salt.

30. The most important point requiring notice, in regard to the salt trade of the Central Provinces, is the manner in which Kokan rail-borne salt is superseding Bunjarah-carried western salts. In every direction Kokan has extended its area. The Bagh river, fifty miles east of Bhundara and 90 miles from Nagpore, was the line of junction of Madras and Bombay salts, but at the close of this past official year Kokan had made its way to Nundgaon, 40 miles further east, and within 40 miles of Raipore, up to which place even one or two despatches had penetrated without, however, finding profitable sale. Again, Kokan has progressed up the trunk road as far as Chupara, and by another road to Chindwara, and according to some accounts not only to Baitool, but well into Hoshungabad. Clearly, it has already permeated the whole country south of the Puchmurree and Satpoora hills, and as soon as the rail is completed to Jubbulpore, will supply much of those portions of the Central Provinces west and north of these ranges.

Future line of junction of Kokan and Rajpootana salt.

31. At present it is impossible to predict where the line of junction between Bombay and Rajpootana salts will ultimately be, but if the G. I. P. offer the same favorable rates to Kokan that the E. I. R. do to our western salts, I expect to see the former selling in Allahabad, until at least, Sambhur, Bhurtpore, and Sooltanpore shall be united by rail with the E. I. Railway.

Temporary reflex movement of Rajpootana salt.

32. During the past year there has been a temporary reflex movement, the opening of the rail to Jubbulpore having brought down some 1,200 maunds to Jubbulpore, Myhere and Burgudh, places that till then had drawn their supplies from Saugor, Jhansie, and Nagpore.

Bunwar salt likely to hold its own in Raipore.

33. Towards the east it seems probable that Bunjarah-carried Madras salt will continue to hold its own in the Raipore division. The Bunjarahs make handsome profits in taking grain down to the coast where it always appears to find a ready sale; and this will always, the traders say, enable them to send the return freight cheaper than Kokan is here ever likely to be sold. At the close of the past rich harvest in Chutteesgurh, vast quantities of grain were exported, and amongst other places to Nagpore. In March the Deputy Commissioner reports that he met strings of empty carts returning from Nagpore. Had the Raipore traders seen their way to sell it at any profit, all these carts would have returned laden with Kokan. Whether the deflection of the Bunjarah traffic round our terminus will affect this question can scarcely yet be predicted; at present there seems little prospect of Kokan in any considerable quantities getting beyond the western border of Raipore.

Present dryage allowance requires reduction.

34. One matter connected with Kokan particularly deserves attention,—I mean the dryage allowance of 3 per cent. made to

traders importing by rail. Originally 3 seers per maund, or 7½ per cent., was allowed, and even the 3 per cent. to which the allowance was soon reduced seems far beyond the requirements of the case. At the works themselves no allowance at all is made, and re-weighments at the frontier have shown that, as a rule, the same excess exists when a despatch enters the Central Provinces that was allowed when it was weighed at Carnac Bunder or Kullian. The fact is, that the salt by the time it is brought for despatch by rail is usually as thoroughly dry as it will ever become unless artificial means of desiccation are resorted to. During the past official year, the loss to our revenue by this 3 per cent. allowance amounted to no less than Rs. 16,755. If any real necessity existed for such an allowance, the Bombay traders would long since have obtained its concession from the Government there, which, however, allows them *nothing*. I recommend an immediate reduction of the dry-age allowance to 1 per cent., except for salt despatched between the 1st July and 30th September, during which period I would allow 2 per cent. This is a temporary arrangement, sudden changes being undesirable; hereafter, I believe that it will be found right to adopt the Bombay rule, and make every seer of salt that comes to the scale pay duty.

Necessity of making certain that all salt admitted by us at half duty rate has really paid the other half and of obtaining a refund of that half.

35. I need not here repeat, what I have already urged, about the necessity that the growing trade in Kokan is creating, of making sure that all the salt admitted by us at half duty has really paid the other half, or of securing, in justice to the Central Provinces, a refund from Bombay of that one-half there realized. The matter is one of vital importance, and will, I feel confident, obtain the earliest attention of the Chief Commissioner; but before quitting the subject of Kokan I must record how admirably Sir Richard Temple's system of duty-paying posts at Kullian and Boree Bunder has worked. Until this idea was started, our Department was in constant difficulty with the railway, and at one time harmonious action seemed impossible. The simple remedy suggested by Sir Richard has effected wonders, and both General Rivers (Agent of the G. I. P.) and Mr. Knox, Traffic Manager, whom I personally consulted, assured me, that nothing could work more satisfactorily than our present system. Over 4 lakhs of rupees have been realized at these posts during the year on account of the Central Provinces and Berar, and since a revision of the rules which I had carried out early in the year, not one single difficulty, or complaint of any kind, has occurred.

The opening of the rail has rendered the continuance of salt importation during the rainy season practicable.

36. One more change in the course of trade effected by the rail, although discussed in the Nagpore Divisional Review, must be here again noticed, *viz.*, that whereas formerly on the commencement of the rains, the trade in salt virtually ceased, now, the imports during the monsoon are fully as great as at any other season. This is an unmixed advantage; work is thus more evenly distributed over the whole year, and all apprehensions of temporary scarcity, (always possible whilst fresh supplies were impossible, during four months of the year,) have been entirely set at rest.

Rajpootana salts.

37. The Rajpootana salts are faring ill. Bunjarah-carried, they cannot compete with the rail-borne Kokan, inferior in quality though this be. Saugor, the lowest division through which Sambhur in any noticeable quantities was ever imported, and through which $\frac{1}{10}$ths of all the Kansia brought into British territory crossed our Line, has suffered greatly; and though this has been in some measure due to the Bunjarahs being temporarily attracted in other directions, it is clear that their trade in this

direction is doomed, and with it the import of Rajpootana salts, except in small quantities for the use of the wealthier classes.

Bunjarah trade.

38. Bunjarah traffic is a thing *per se*, playing the most important part in the commerce of the wilder tracts; its existence ceases to be possible when advancing civilization brings with it either railroads or close cultivation. The former underbid them as carriers, the latter deprives their herds of sustenance. The question is constantly asked, what is the cost of carriage by Bunjarahs? To this no reply can be given; in one sense the carriage costs nothing. The Bunjarah has his herds, which he increases by breeding, and other means lawful and unlawful; he *must* move about with these somewhere; remaining in one place, forage would soon be difficult to procure. He loads his oxen with any thing that he believes or hears will sell at a profit, at any distant place between which, and his station, convenient forests and jungles lie. What well cleared country is to others, that the forest and the jungle is to the Bunjarah. His herds live for nothing; his own food is chiefly milk and jungle produce, and though he indulges in flour, and even ghee at times, these two in some parts of the country (where the Bunjarahs have villages and not mere peraws or gowrees in the centre of the jungle) are home produce. Arrived at his destination, whatever advance upon their cost price his goods realize is to him profit; he has no item of expenditure, as a rule, to set against it. Every expense that he may incur is more than covered by the sale of cattle, which he does not need, often the produce of his own herd, more often stolen ones. The Bunjarahs have a wonderful knack of appropriating stray animals, and in some parts of the country I have found them the chief receivers of stolen cattle,—buying in one district to sell at greatly enhanced prices elsewhere; move about they must; they find profit in it in many ways, and if while so doing, and keeping their herds well fed, and living the only life they really like, they make any profit by the sale of the goods they carry, it is all net gain to them. They will carry goods a couple of hundred miles to make a profit of 5 or 6 annas a maund, and they will go many hundred miles round to avoid a duty like ours of Rs. 3 or even Rs. 1-8 a maund. It is impossible, where Bunjarah traffic is concerned, to say that it will not pay to go round any given distance to avoid a considerable impost. Time and distance seem scarcely to enter into their calculations, so long as forage and water are plentiful, and cost nothing.

39. All this, however, is changed when the absorption of waste lands as grants, as in Saugor, and the imposition of grazing taxes as in other parts of the Central Provinces, compel them to pay for the food their herds consume; then their traffic becomes impossible, as indeed it is now becoming in the Central Provinces, where, before many years (except perhaps in Sumbulpore, where there is no grazing tax), the Bunjarahs will have ceased to play any part in the commerce of the country.

Disappearing under the pressure of railway competition and grazing taxes.

Mr. Vere says: "It is no secret that the traditional occupation of their race is slipping from the hands of the Bunjarahs, who reluctantly and grudgingly are themselves awakening to, and struggling against, the conviction. It is a common and bitter complaint amongst them, that the act of their rulers is wresting from them the calling which has fed their forefathers for centuries. Times are hard with the Bunjarahs; on one side the railway obliterates them wherever its trains once run, and now when those who have not taken to agriculture (as thousands are doing in Berar) take refuge in those tracts where, as carriers, they would

still be welcome to the public, they stumble over the new obstacle of grazing fees, which will end by starving them out of count, and against which their declamation is angry and loud. To them, the freedom of the forest is the breath of life. In the old days, the wilder that forest, so long as there was a fair track through it, the better their cattle throve, and herein lay the secret of their ability to serve the public and to make profit for themselves. All this comes to an end when for the permission to graze in wildernesses, *where they alone venture*, they have to pay taxes, which, in places, range as high as a rupee per diem for every hundred head of cattle—young, old, able or lame, sucking calf or milch cow, as well as pack bullock. The possessor of a couple of hundred head, no rare possession, is mulcted of Rs. 60 per mensem,—simple prohibition and ruin to men whose wealth is in kind and not in coin." I am not in a position (nor if I was, would it be within my province) to offer any opinion as to the propriety or otherwise of these grazing taxes, but it is certain that they are driving away the Bunjarahs from places where there is neither rail nor road, to enable other forms of carriage to take the place of their bullocks, and that the realizations of such portions of our Line as have hitherto depended on their supplies have suffered, and may probably suffer yet further, from their disappearance.

Bhooskie.

40. The trade in Bhooskie salt, the produce of Berar, is all but extinct. The levy of full duty on this inferior salt, and the abundance of good Kokan introduced by rail, is driving this entirely out of the field, except in Berar itself. Here the right to manufacture has been farmed out at a rate far below what the present duty amounts to, and hence, utterly inferior as it is in quality, this salt holds its ground to a certain extent. The question of the course to be adopted in regard to it in Berar has been for many months before the Resident of Hydrabad.

Sugar.

41. I have already noticed the leading points connected with the sugar trade; the error (now rectified) of neglecting to tax Bombay sugar when exported across our Line, the probability of a large increase to the trade of the Saugor and Hoshungabad, and decrease in that of Nagpore divisions in eastern sugars, on the completion of the G. I. P., the certain influx of eastern raw sugars, and the consequent necessity of placing these on the same duty footing throughout the Central Provinces that they occupy in the major portion of Saugor and throughout the North-Western Provinces and Punjab sections, have all been fully discussed in this or the Divisional Reviews that are appended to it and need not here be further recurred to.

SMUGGLING.

42. The most prominent features in the illicit trade of the Central Provinces have been very fully discussed in the several Divisional Reviews. In Saugor, petty smuggling has been excessively troublesome, and in Raipore smuggling on a more formidable scale has been rampant. In both, seizures have increased in number in proportion to the increase of attempts. In both, physical difficulties, and in the latter excessive weakness of the Line, have had to be contended with. In Saugor the opening of the railway to Nursingpore, and the gradual establishment of a good hedge, will (when deprived of the temporary stimulus afforded by the diversion of Bunjarah traffic and consequent high prices) reduce smuggling within narrow limits, but in Raipore the strengthening of the Line at a cost of Rs. 15,000 per annum is an absolute *sine quâ non*, as indeed a minute personal inspection of it by the Deputy Commissioner has proved. I earnestly trust that Government will not hesitate to sanction this measure

immediately, and so enable us to have the strengthened Line ready to meet the coming trading season. In Nagpore and Hoshungabad, where circumstances are different, the Line, though in places a mere skeleton, seems efficient enough, and smuggling, always here petty in the extreme, seems to be kept well in check. Various minor improvements in the Line, and most noteably the obviation of the Nundgaon gap between the Nagpore and Raipore Divisions, have been recommended separately, and will, when sanctioned, diminish the facilities now existing for illicit trade. Lastly, the wholesale influx into Chota Nagpore, the tributary mehals and tracts that formerly drew their supplies across Chutteesgurh of Bunjarah-carried, low-dutied or smuggled salt by Bamra and other routes outside our present terminus, has been noticed, and the necessity of a prolongation of our Line to the sea coast insisted on; and although action in this matter rests with His Honor the Lieutenant-Governor of Bengal, to whose consideration I have personally, and in demi-official letters, submitted it, its importance to the Central Provinces is such, that I trust the Chief Commissioner will prominently notice it.

PENAL ACTION OF THE DEPARTMENT.

43. The penal action of the Department in the Central Provinces during 1867-68, as compared with the same in the preceding 12 months, is exhibited in the subjoined table:—

Persons.

Detected.		Released by Department.		Committed.		Acquitted.		Convicted.		Percentage of convictions on committals.	
1866-67.	1867-68.	1866-67.	1867-68.	1866-67.	1867-68.	1866-67.	1867-68.	1866-67.	1867-68.	1866-67.	1867-68.
1,742	1,745	922	972	820	773	30	31	790	742	96·3	96

In all cases in which persons are detected in a breach of the customs' laws, in which ignorance or any probable excuse can be reasonably pleaded, or in which the quantities attempted to be brought in, are less than 10 lbs.; in fact in all cases in which wilful and deliberate violation of the law is not palpable, the Departmental Officers release the offenders on payment of single or double duty. It is only smugglers by trade, as far as such can be discriminated, against whom our prosecutions are directed. It follows that, though tried by independent tribunals, certainly not prejudiced in favor of the department, few of our committals fail; all therefore that lies with *us* to protect the interests of Government, and at the same time spare the people from as much inconvenience and suffering as possible, is, it seems to me, done. I regret to have to urge that in my humble opinion, our efforts are not seconded, as they should be, by the judicial tribunals of the country, who, out of the kindliest and most natural sympathy with men who, when brought into Court, dress and act the part of wretched poverty-stricken beings, inflict, too habitually, punishments inadequate to deter the offenders themselves, or others like them, from repeating the offence.

Action of the Courts.

44. If we turn to the result of the convictions during the past year this will, I think, be apparent. Sixteen of the offenders paid fines—

Average above Rs. 10, but under Rs. 20 6
" " " 5 " " " 10 10

Seven hundred and twenty-six were imprisoned in default of payment of fines—

Average for 1 month and less than 2 months 303
" " 15 days " " " 1 month 168
" " 10 " " " " 15 days 255

Now, admit that we do not always rightly discriminate, and that many of these were not professional smugglers, still very many of them admittedly were bhang-drinking, opium-smoking reprobates, to whom smuggling furnishes the means of debauchery. Are punishments like those above detailed in any way adequate? When smugglers in and out of jail (for those imprisoned commonly receive their full share from their luckier comrades) can easily make as a body from 12 to 15 rupees a month, by a little light congenial night work, can nominal sentences, such as are so often inflicted in the Central Provinces, aid us much to stop illicit trade? The circumstances of the Saugor Division for instance, are such that smugglers are certainly not caught in *more* than one case in eight, and goods are not seized in more than three cases out of eight. In Raipore, if *goods* even are seized in one case in ten, it is more than we have a right to expect. Surely under these circumstances, some little severity in palpable cases, when the offenders *are* caught, is desirable. Six months' imprisonment with hard labor for mere smuggling may seem a severe sentence, but if it be considered that men deliberately, and of purpose aforethought, lay themselves out to make, and succeed in making, a luxurious livelihood, out of a violation of the law, such a punishment is surely not unreasonable, when once, in many ventures they are arrested.

Inadequacy of punishment inflicted.

45. Looking to general consequences, as I have already urged, instead of to particular results, how necessary a little wholesome severity appears. Amongst uneducated, semi-barbarous people such as we have here to deal with, how cruel it is to repress with a wavering hand any practice it may have been determined to eradicate. Ten men come under the lash of the law by the Courts failing to prove by seasonable severity that they are in earnest, for *one* that would otherwise have done so. 742 convictions may not seem much on a Line of 1,200 miles in length, but it is double and treble the number we should have to record, if imprisonment on convicted offenders, was to vary from three to six months in every case with hard labor, instead of as now, from ten days to less than two months (very often I am assured without labor) as a maximum! How unfair, too, is this system to honest traders;—how injuriously it reacts on licit trade! I feel confident that if Government would only press upon Judicial Officers a consideration of these points; the large profits netted by systematic smugglers; the necessary unfrequency of their capture as compared with their successful ventures; the encouragement that light punishments consequently hold out to the people to engage in this demoralizing profession; the discouragement that it affords to legitimate trade; the advantages that would accrue to both the people and the State, by a resolute repression of smuggling, and the diminution in their own work that would result; a favorable change in the present practice of the Courts would result. We have no complaint against the regular Courts; we bear willing testimony to the care and patience with which, as a rule, our cases are disposed of, but we do urge, that, when a Court does convict an offender, it should award a punishment somewhat more commensurate with the profits of his crime, than is *ever* now inflicted in the Central Provinces.

Honorary Magistrates.

46. In the Saugor Divisional Review I have noticed the complaints of the local Customs Officers, against the interference of the Honorary Magistrates. I shall here only repeat my suggestion that Government should consider, whether Honorary Magistrates should be permitted to take up cases in which one party

are Government servants, and the other their own retainers and tenants. In Oudh, the absence of personal interest in the deciding Officer is so strongly insisted on, that Deputy Commissioners are prohibited from trying civil cases, where the cause of action arose in their own districts, when Government is a party in the suit.

Goods.

47. Besides criminal prosecutions, confiscation of 3,535 maunds of goods valued (to the owners) at Rs. 8,700, and levy of double duty to the amount of Rs. 9,003, were enforced during the past year by Revenue Commissioners on the recommendation of the Department. Of 1,479 such recommendations, 1,462 were approved, 4 disallowed, and 13 remained undisposed of at the end of the year.

48. It may be thought that these penalties, amounting to a fine of Rs. 17,700, have compensated for the want of severity of the judicial sentences, and in a few isolated cases, they have *doubtless* done so, but the 972 instances, in which persons were detected in the act of *contravening* the Customs' laws, indicate, I should estimate, something like 10,000 such instances, and the 742 convictions point (in regard to the circumstances of the Central Provinces Line) to at least 8,000 wilful violations of the law, and the total fine spread over all these cases is scarcely more than Rs. 2 per case. Again, out of the somewhat less than 25,000 maunds estimated to have been smuggled across the whole Imperial Line during the year, I cannot allot less than 18,000 maunds to the Central Provinces, which would give a gain of Rs. 28,500, and balanced against the Rs. 17,700, a net profit to the smuggling class as a whole of Rs. 10,800. Moreover, it should be borne in mind that very frequently when confiscations go along with judicial punishments the offender who has been convicted is *not* the sole owner, or even principal owner of the goods, so that, as a general rule, unless the judicial sentence carries in itself sufficient arguments against smuggling, no collateral check on this, such as the confiscation of goods affords, is likely to be of much avail.

HEDGE.

49. No where in the Central Provinces has the hedge yet attained any perfection; local difficulties of a formidable character, the recent organization of the greater *portion* of the Line, the numerous changes in the position of older portions, the prospect of further wholesale changes, the great distances at which so many of the posts are situated, and (I regret to have to add) the supineness of the Officers of more than one division, have all combined to deprive us hitherto of this great safeguard. In the several Divisional Reviews further particulars will be found. I shall content myself here with remarking, that stringent orders have now been issued on this subject, and that all practicable results may be looked for; but that in the Saugor Division, special measures, (such as taking up plots of land for us on which to grow material for the dry hedge) will in some places be necessary; that in those beats of Hoshungabad and Nagpore in which the posts are several miles apart, little progress can be expected, and that in Raipore, no satisfactory results can be *hoped* for, until that division is reorganized on a 2-mile post footing.

OFFICERS.

50. Of the officers specially deserving of commendation, Mr. Jones, Collector of Saugor, Mr. Nunn, recently appointed Collector of Hoshungabad (and for many years the Patrol of Bichporee, the most important post on the whole Line), Messrs. Cosserat, J. D. Young, and Baness, Patrols, and Messrs. Huckstepp and Paxton, Assistants, must be mentioned; other officers have been

favorably noticed in the Divisional Reviews, but these have, on the whole, best deserved the approbation of Government.

Establishment.

51. The establishment is everywhere in the Central Provinces, and notably in Saugor, below par; a trying climate, unhealthy posts, exceptionally hard work, and wretched pay, with the chance in places of being carried off in open day-light from the Line itself, by tigers (as one of our men was during the past year in the Ambagurh beat), all combine to render it difficult, and in some divisions impossible to obtain proper recruits, or keep the establishment at all times up to its sanctioned strength. Nothing but the prospect of increased pay which is known to have been recommended by myself and approved by the Officiating Chief Commissioner, has kept the force even up to its existing standard, and unless this increase be sanctioned (as there is now much hope of its being), I confess that our position will, especially in Saugor, be a difficult and even dangerous one. In the Raipore Division we are trying the experiment of enlisting Ooriahs to the extent of 25 per cent. of the force, and so far, it has been (I am of opinion) a decided success. At the same time, we have seen quite enough to be certain that we could not, at present at least, safely allow any much higher percentage of this class, and that for some time to come at least up-country men must constitute even here something like half the force, if efficiency is to be aimed at. It is not too much to say that first and foremost above every other matter the future prospects of the Central Provinces Customs' Revenue primarily depends on the concession of that increase of pay which has been so long and anxiously looked for, and so earnestly pleaded for.

SAUGOR DIVISION.

SAUGOR DIVISION.
Line.

52. The Saugor Division, the seventh of the Imperial Line and the first of the Central Provinces' Section, commences at present in the Lullutpore District, about 2¼ miles north of Goonah, and running through portions of this district, Saugor, Nursingpore and Hoshungabad, terminates in the latter some 12 miles south of Oomerdha.

Its course.

53. It runs through Goonah, Burodhia, Bandree, Saugor, Tillee, Gaurjhamhar, Deoree, Tendoo Khera, Paloha, Saen Khera and Oomerdha, and has a total length of 144¼ miles.

FINANCIAL RESULTS.
GROSS REALIZATIONS

54. The gross realizations of the Saugor Division for the official year 1867-68 amounted to only Rs. 8,21,033, a sum not only 15·6 per cent. below the receipts for the corresponding 12 months of 1866-67, but also more than 10 per cent. below those for a similar period of 1865-66. In *no* division, but Nagpore, have the collections of the past equalled those of the preceding year, but in *every* division, except Saugor and Hoshungabad, they have considerably exceeded those of any other previous year.

Compared with those of previous corresponding 12 monthly periods.

55. How matters have stood in Saugor will be seen from the following:—

Detail of gross realizations of the Saugor Division in 1867-68 *and preceding corresponding years.*

Year.			Salt.	Sugar.	Miscellaneous.	Total.
			Rs.	Rs.	Rs.	Rs.
		1867-68 ...	7,71,722	42,201	7,110	8,21,033
Corresponding 12 months		1866-67 ...	9,26,910	43,776	2,398	9,73,084
Do.	do.	1865-66 ...	8,67,515	48,593	2,682	9,18,790
Do.	do.	1864-65 ...	6,96,756	58,900	3,469	7,59,125

It will be seen from the above, that, while even in sugar, there is a decrease of more than $3\frac{1}{2}$ per cent.; in salt, there is a falling-off over $16\frac{1}{2}$ per cent.

Salt. *Decrease.*

56. The decrease in the salt revenue is due primarily to a great deficiency of carriage along the direct line of import which has operated in two different ways—1*st*, in forcing up rail-borne Kokan to Seonee, Chindwarra, and it is said even Baitool, thus invading the country in rear of the Saugor and Hoshungabad Divisions, formerly supplied by Sambhur and Kansia or Puchbuddra across those Lines; and 2*nd*, by greatly stimulating smuggling. Bunjarah cattle, where Saugor is concerned, are the principal means of transport for direct imports, and two different causes have, during this past year, combined to prevent the Bunjarahs coming in as great numbers as usual to Saugor, and other neighbouring marts. There was an unusual demand for grain southward and westward, and the Bunjarahs, instead of coming on to British territory with their early loads of salt, disposed of these in exchange for grain in Bhopal and other Native States, and then, for the time, went vigorously into the grain trade. Again, setting aside this temptation to throw their capital and labor temporarily into what was for the moment a more lucrative trade, it is daily becoming more and more difficult for Bunjarahs to make a profit on investments brought into Saugor and the neighbourhood.

57. The essence of Bunjarah trade is a fair supply of fodder, *gratis*, for the cattle used, and this, the grant rules and resumptions of waste lands, are gradually rendering more and more difficult to obtain. Pasture is becoming more and more valuable. Grantees and zemindars are beginning to charge the Bunjarahs for the fodder their herds consume, and thus surely, if gradually, barring the door to their trade in this direction. I have touched already (para. 38, Central Provinces' Sectional Review) on the peculiarities of the Bunjarah commerce, and shall not re-open the question here; suffice it to say that this was greatly checked by the causes indicated above; that a shortness of salt in rear of the Saugor Line was the result, and that the consequences were an influx from the Nagpore direction of Kokan salt right up to the base of the Puchmurree Hills, and a simultaneous vigorous impetus to smuggling across our Line from well-supplied marts in native territory, such as Bhopal, where the best salts (Kansia and Sambhur) were selling at Rs. 13 a pulla of 3 maunds and 30 seers, or rather less than Rs. 3-7-6 a maund.

58. That this smuggling here and elsewhere, west of Chutteesgurh did not lead to any *very* serious loss, and that Kokan *did*, at any rate to a great extent, supply the place formerly held by Kansia and Sambhur (the only imports of the Saugor Division) will be seen by comparing the total imports of each of these three kinds of salt into the Central Provinces as a whole, during the past and previous years.

Total imports of the Central Provinces of Sambhur, Kansia and Kokan.

Year.	Sambhur.	Kansia.	Kokan.	Total.
	Mds.	Mds.	Mds.	Mds.
1867-68	38,664	2,41,455	3,61,524	6,41,643
Corresponding 12 months of 1866-67	55,514	2,75,220	2,81,533	6,12,267

OF THE IMPERIAL CUSTOMS LINE FOR THE OFFICIAL YEAR 1867-68.

59. Of smuggling, more will be said hereafter, and I turn now to the detail in maunds of salts of different descriptions imported across the Saugor Division. *Detail of descriptions of salt imported.*

Year.	Sambhur.	Kansia.	Miscellaneous.	Total.
	Mds.	Mds.	Mds.	Mds.
1867-68	38,567	2,18,674	.....	2,57,241
Corresponding 12 months of 1866-67	55,259	2,53,711	.....	3,08,970
Do. do. 1865-66...	51,251	2,36,384	1,537	2,89,172
Do. do. 1864-65...	35,816	1,91,882	4,567	2,32,265

Sambhur and Kansia, in the proportion of one to six, were as above noticed, the only imports in this division, up to the laying down of the Nagpore and Raipore Lines in January and May 1865. The imports of this division supplied, as a rule, only the country west of the Puchmurree Hills, and north of these towards Jubbulpore; Kokan was coming in, virtually untaxed. Bhooskie salt was greatly used by sections of the poorer classes; even Rajpootana salts were rounding or escaping untaxed through the local Nimar, and avowedly somewhat inefficient, Wurdah valley and other Local Lines. When these new Lines were opened, the course of trade changed, and a large increase took place in the trade of Saugor, where temporary local causes aided the development, and Kansia and Sambhur imported through Saugor found its way to Chupara, Seonee and other marts, which had theretofore drawn their chief supplies from the S. and S. W. *Now* the opening of the rail and the check to Bunjarah imports have again thrown the supplies of the country west and south of the Satpoorah and Puchmurree Hills into the old route; which, however, is at the present time, exclusively occupied by Kokan, formerly only a sharer in the market. *Fluctuations in imports.*

60. Turning now to Sugar, we find a decrease here also, though of a much less formidable character. The results of the past four corresponding 12 monthly periods are compared below:— Sugar.

Detail of Sugar (in Mds.) crossing the Saugor Division.

Year.	Refined.	Unrefined.	Total.
	Mds.	Mds.	Mds.
1867-68	37,142	13,491	50,633
Corresponding 12 months of 1866-67	37,937	15,571	53,508
Do. do. 1865-66	43,795	12,795	56,590
Do. do. 1864-65	56,027	7,661	63,688

Detail of Raw and Refined.

The results may be thus explained. In the first place from 1864-65, a steady decrease in the export of the refined article is observable, and this is exactly what might have been expected, since almost every maund of this sugar is derived from marts east of Allahabad, and traders, since the opening of the rail, have found it most convenient to send their goods to all parts of Rajpootana, except perhaps those immediately in front, or to the south-east of the Saugor Line, *viâ* Cawnpore and Jhansie, Etawah and Gwalior, Agra and Bhurtpore or Dholpore. But here in 1867-68, when carriage was not only scarce, in and about Saugor, but when carriage on the far east, which in old times competed *Fluctuations.*

in this trade, was greatly absorbed in the Orissa grain trade, and when consequently, a larger decrease than in any preceding year might have been looked for, we have scarcely any decrease at all. I believe that this is due to two causes—*First*, the general stimulus which abundant crops gave to the whole sugar trade of Upper India, crowding the eastern marts; and *secondly*, to the opening of the rail to Jubbulpore, thus giving to Mirzapore, &c., previously unknown facilities for working off a surplus.

Unrefined Sugar.

61. In unrefined sugar the case is different. On this no duty is levied below Tendoo Khera, the lowest post in the old Saugor Division. No duty is levied on goor in the Hoshungabad Division, and as the Paloha, Saen Khera and Oomerdha beats formerly belonged to Hoshungabad, from which they were only transferred in about February 1867; no duty is now levied at them on raw sugars, although they belong to a division in which the levy of such duty was authorized. This and indeed the general question of taxing goor must be re-considered; but this is noticed in the General Review, and all that need be said here is, that in my judgment, whether duty be or be not levied elsewhere, (*vide* para. 19, Central Provinces' Sectional Review) it should certainly be levied throughout the Saugor Division. At present most of the goor exported, especially below Saugor itself, is locally produced, and hitherto the development of the trade has been steady. During the past year, however, scarcity of carriage, and partial failure of crops, greatly checked it, and the decrease in raw exports would have been more marked even than it is, had not the causes above alluded to as having swelled the exports of the refined, to a certain extent, enhanced those of the unrefined as well.

Miscellaneous.

62. The items composing our miscellaneous revenue need little notice. They consist chiefly of fines, sale proceeds of confiscated goods and the like, brought to credit under this head when realized and debited later under the head of charges on distribution to the informers, captors, &c. During the past year, as already noticed, smuggling and attempts at smuggling increased in a marked manner, and seizures as well of illicitly carried articles as of the persons carrying them, multiplied in like manner, thus raising the miscellaneous revenue to an unprecedented height.

CHARGES.

63. The gross charges of the Saugor Division for 1867-68, amounted to Rs. 1,36,941, which I proceed to compare in detail with those of previous corresponding periods.

Details of charges for the past, and three preceding years.

Details.

Year.	Fixed.	Contingencies.	Petty constructions and repairs.	Total.
	Rs.	Rs.	Rs.	Rs.
1867-68	1,18,499	13,251	5,191	1,36,941
Corresponding 12 months of 1866-67	99,526	11,151	2,408	1,13,085
Do. do. 1865-66...	1,04,724	4,706	1,320	1,10,750
Do. do. 1864-65...	92,662	4,758	...	97,420

The increase in the fixed establishment is chiefly due to the transfer to this division (as above mentioned) of three beats, with their officers and men from the Hoshungabad Division.

OF THE IMPERIAL CUSTOMS LINE FOR THE OFFICIAL YEAR 1867-68.

Contingencies have been increased by the unusual amount of seizure money, already noticed under miscellaneous revenue, and the third item of petty repairs and constructions by the debit in our accounts, for the first time, of the whole of the money so expended; such having been formerly charged to the Public Works Department.

NET REVENUE

64. The net receipts of the division amounted only to Rs. 6,84,092; how these contrast with those of preceding corresponding periods is shown in the sub-noted Table:—

compared with those of previous years.

Year.	Gross Realizations.	Charges.	Net Receipts.	Percentage of charges on gross realizations.
	Rs.	Rs.	Rs.	
1867-68	8,21,033	1,36,941	6,84,092	16·67
Corresponding 12 months of 1866-67	9,73,084	1,13,085	8,59,999	11·62
Ditto of 1865-66 ...	9,18,790	1,10,750	8,08,040	12·05
Ditto of 1864-65 ...	7,59,125	97,420	6,61,705	12·84

The diminution in revenue, and increase in charges already noticed, explain both the decrease in the net receipts, and the increase in the percentage of charges. As I have remarked in the case of other divisions, no useful results can be deduced from a consideration of the percentage of costs on collections in any single division, or even section of the Line. It is only by taking the departmental results as a whole, that any approximately correct conclusions even can be arrived at.

COURSE OF TRADE.
Salt.

65. I have already noticed some features in the course of the Saugor salt trade when explaining the fluctuations that have occurred in the amounts of Kansia and Sambhur salt imported. I pointed out that originally the imports of this division enjoyed a comparatively small area of distribution; that the laying down of the Nagpore and Raipore Lines had, by excluding other hitherto untaxed competitors, greatly widened this area, which, during the past year, had again been narrowed by the checks received by the Bunjarah trade, coupled with the facilities afforded by the rail for transporting Kokan to Nagpore, whence good roads lead into the heart of the country, which, during the previous two years, had drawn much of its supplies from the Saugor divisional imports.

66. At present, Saugor is the greatest place of import for the beautiful Puchbuddra or Kansia salt; $\frac{11}{12}$ths of all the salt of this description that crosses the Imperial Line, crosses in this division, and unless some additional facilities are afforded to this staple, such as the rail by Deesa and Erinpoora would give, it is easy to see how seriously its import will decline. Sambhur, too, will probably suffer, but Saugor is just at the borders of the Sambhur Province, and imports less than $\frac{1}{16}$th of the total quantity of this salt that crosses our Line; besides it is not impossible that Sambhur *may* come down the line *viâ* Allahabad and Jubbulpore, and so gain there, what it loses nearer our Line; but the case is different with Kansia. The import trade of the Saugor Division is doomed, and with it apparently the import of Kansia; already Kokan comes up to Beer,

beyond Khundwa by rail. At Hurda, to which place it will shortly open, the traders openly declare that the moment it does so, Kokan will be their only staple; yard by yard with the rail, Kokan will march on; it will certainly pervade the country in rear of the Saugor and Hoshungabad Divisions, and it may even find its way to the Allahabad market. Except amongst the wealthy few, Bunjarah-carried Puchbuddra will never be able to compete with rail-borne Kokan, and the result will be a complete revolution in the course of the salt trade throughout the west, north, and centre of the Central Provinces.

Sugar.

67. In the sugar trade of the Saugor Division, the opening of the rail will produce no less marked results. For some years now, as I have already noticed, the Saugor trade in refined sugar has been dwindling away; this class of sugars, the exports of marts east of Allahabad, being diverted to routes leaving the railway at Cawnpore, Etawah and Agra. The opening of the rail to Jubbulpore has already caused a diversion in favor of Saugor, which may be expected to operate much more powerfully when Nursingpore is linked by rail with Mirzapore. But it is not only the refined article which is likely to take this course; already raw sugars, heretofore when exported by Saugor, almost exclusively the produce of the Central Provinces themselves, have commenced to find their way from the eastern marts, and when the G. I. P. is completed, there seems every chance of their either beating the Central Provinces produce out of the market, or if the demand in Rajpootana be sufficiently great, largely swelling the exports of Saugor and even Hoshungabad. It is almost needless to add here what I have urged in other places (paras. 19 and 61) that when this takes place we must, if we would be either consistent or equitable, tax raw as well as refined exports in the Central Provinces as elsewhere.

SMUGGLING.

68. In smuggling there has, during the past year, been a very serious increase throughout the Saugor Division, but especially in its southern portion. The deficiency of salt caused by the suspension of the Bunjarah trade greatly enhanced its price. Shortly after the rains, the pulla of 3 maunds 20 seers was selling at Gadurwarra at Rs. 30, or nearly Rs. 8-10 a maund, wholesale, while smuggled salt that had been seized sold at auction at Rs. 10-4 a maund. Such extraordinary prices, coupled with the equally high price of grain, could have no other result than that of encouraging smuggling across a Line, presenting numberless physical facilities to the smuggler, having the majority of the chuprassees' posts over one mile apart, and as yet possessing (*vide infra*) no sufficient hedge to bar the passage of illicit trade. Numbers of seizures were made; 1,134 maunds of salt (it is all head-load smuggling) were stopped, against 461 in the previous year, and 280 persons were convicted, but the temptation was great, and the sentences passed by the judicial tribunals on the smugglers they convicted, afforded little inducement to resist it. I have already in the General Review (paras. 125-126) noticed the great difficulties that we have here to contend with in suppressing smuggling, and I need only here add, that although perhaps at one time the Local Officers scarcely did as much as might have been hoped for, they have since been doing all that could possibly be done, and that notwithstanding this, no thorough suppression of smuggling has been effected, or indeed can be hoped for here, until we possess a more efficient barrier, and receive more satisfactory support from the criminal courts, or until the opening of the rail diminishes the temptations to illicit trade.

PENAL ACTION OF THE DEPT.
Persons.

69. During the past year 598 persons were apprehended in the Saugor Division for breaches of the Customs' laws against only 428 in 1866-67, but acting up to our present principle of prosecuting only palpably wilful violaters of the law, 313 were released by the Department in 1867-68 on payment of single or double duty, against only 180 in the previous year. The results of the trials of these committed in each year are thus shown:—

Committed for trial.		Acquitted by the Courts.		Convicted by the Courts.		Percentage of convictions on committals.	
1866-67.	1867-68.	1866-67.	1867-68.	1866-67.	1867-68.	1866-67.	1867-68.
248	285	9	5	239	280	96·36	98·24

Action of the Courts.

70. Now when prosecutions are so judiciously made that in 98¼ cases per cent. convictions are obtained,—when in fact the results of the trials by independent tribunals proves conclusively that the Departmental Officers carefully eliminate all cases in which the wilful guilt of the offender is not clear, it does seem to me that the Government have a right to expect that greater support should be given to us in the discharge of our duty than we receive from the Courts here and elsewhere. Of 280 persons convicted, no one paid fines, all underwent imprisonment, 34 for periods averaging less than a month (mostly, I believe, 15 days) 248 for periods averaging less than 2 months (mostly, I believe, 1 month). There may have been extenuating circumstances in a case here and there, but is it reasonable to suppose that at least 25 per cent. of these men did not deserve 6 months, and at least 50 per cent. more of them 3 months? I do not hesitate to say, that the lenient sentences here passed, (and they have unfortunately been even more lenient in other divisions) in the face of the extreme prevalence of the offence, and the temptations to its commission, have done much harm to Government, and to the people. It is obvious, that they have only resulted from the most honorable and kindly feelings and sympathy with the miserable appearance that smugglers invariably manage to present in Court; but we must look, I contend, to general results, and not to particular instances; and how undesirable the general results of leniency in the punishment of this class of offenders is, I have already, I hope, sufficiently explained in the General Review.

Honorary Magistrates.

71. There is one point in regard to the action of the Courts to which I would call special attention. The Local Officers strongly insist upon it, and I myself admit that there is some weight in their plea, that Honorary Magistrates should not be allowed to take up cases against the men and officers of the Department for alleged illegal acts in the discharge of their duty. In July last two peons of the Oomerdha beat were fined by the Honorary Magistrate of Sobhapore, Rs. 4 each, for simply, as the enquiries of their own superiors led them to believe, doing their duty, *i. e.*, searching a native (a retainer or tenant of the Chief's) who was crossing the Line with bundles of grass, in which anything might have been concealed. This has had the effect of greatly deterring the men from doing their duty,—at any rate, where this gentleman's dependants are concerned. It not unfrequently happens, that native noblemen in the wilder parts of the country are unfavorably disposed to the Department, especially where their estates adjoin or are traversed by the Line. The presence of independent European officials acts as a certain check upon their proceedings. Their tenants, it is asserted, (perhaps relying on their Chiefs' protection) more often engage in illicit trade than others, and are

more often captured. Altogether, it seems undesirable that an Honorary Magistrate should be the Judge, in cases, in which one party are Government servants, and the other, his own tenants or retainers. I have great faith in the efficacy of the Honorary Magistrates' system, and statistics will show, that, whilst in charge of the Etawah District, more work was done by the Honorary Magistrates under my control, than in any other district in the North-Western Provinces; but I have always held it inadvisable to allow Honorary Magistrates to take up cases in which Government servants were concerned; and I venture to suggest that, especially where the men of our Department are concerned, this rule might be adopted with advantage throughout the Central Provinces.

Goods.

72. Besides Court prosecutions the confiscation of 1,134 maunds of goods valued at Rs. 3,300,* and levy of double duty to the amount of Rs. 756 were enforced by Revenue Commissioners on the recommendation of this Department. Altogether 679 such recommendations were made, and all were sooner or later concurred in, and approved, by the revenue authorities.

HEDGE.

73. The hedge in the Saugor Division is in a very backward and unsatisfactory condition, and this is due to several causes. In the first place, there are peculiar difficulties to contend with, in the second, material changes were not long since made in the position of the Line. As to the difficulties. A proper dry hedge cannot be got up, the waste lands having been granted away; the men cannot in most places take any brushwood, even out of the jungle, without paying 2 annas a cart-load for it, which of course neither they, nor the Department, can afford. Even where they do manage to obtain material, and get up a decent hedge, the jungle grass fires are pretty sure to destroy long reaches of it. In parts of the division again, the Line runs through low land, intersected by innumerable nullahs, and here the dry hedge gets swept away in lengths of $\frac{1}{4}$ of a mile at a time;—white ants and decay, soon destroy what escapes more sudden violence. If plenty of material were available, these difficulties are not insuperable, but as a rule, absolutely *no* material is available, and in *no* place is it obtained without great difficulty. The only remedy for this, and we *must* have a dry hedge (in some places where no green hedge will ever grow permanently, and almost everywhere temporarily) is for Government to take up for us, under the public purposes appropriation law, plots of waste and jungle land contiguous to the Line, whence sufficient supplies may be drawn, and where we shall regularly grow our own material. Formal applications will be later submitted. As regards the green hedge, wherever it *will* grow, it has been, or will be, sown during this present rainy season. But floods, hail, rats, white ants, all seem to conspire against us, and in many places miles of promising young plants have disappeared in an inconceivably short time. The jungle fires, too, destroy the green, as well as the dry hedge, and it is utterly impossible for the Department to do what ought in such places to be done, that is to say, keep a strip of land 30 yards wide in rear of the hedge, entirely free from dry grass. They dare not meddle with the ground, and if they did, they have already 12 hours out of the 24, sentry duty and work at the hedge to do besides. Much however can be done, in at least two-thirds of the division. I look forward to getting up a good hedge without extraordinary measures; in regard to the remainder, I

* This was the value to persons who owned it; it sold probably for something like Rs. 8,000.

shall then be in a position to come up to Government with specific plans and estimates.

OFFICERS.

74. Mr. Jones, the Collector of Saugor, is a very thoughtful and intelligent officer, and although in one or two matters I scarcely think he has done as much as he ought to have done, I have, on the whole, so far as I have yet had an opportunity of judging of it, been well satisfied with his administration. Amongst subordinate officers I would particularly mention Mr. A. F. Baness, Patrol; Mr. C. Kemp, Patrol, Mr. D. Reid and Sayud Ghazeeooddeen, Assistant Patrols, have also done well. Our Line in this division is a terrible place for fever, and if everything has not at all times been done exactly as energetically and thoroughly as I could have wished, we are bound to remember, that, during the past season nearly every single Officer, including the Collector, has suffered severely from this disease.

HOSHUNGABAD DIVISION.

HOSHUNGABAD DIVISION.
Line.

75. The Hoshungabad Division, the 8th of the Imperial Line, and 2nd of the Central Provinces' Section, commences in the Hoshungabad district about 5 miles north of Mowa Khera, and terminates on the Goongal River on the borders of Baitool, some 90 miles east of Boorhanpore.

Its course.

76. It runs through Mowa Khera, Patnee, Hoshungabad, Sheopore, Hurda, Khundwa and Boorhanpore, at each of which a Patrol or Assistant Patrol is posted, and is altogether 298 miles in length. As far as Khundwa the Line though weak, (especially beyond Hurda) is yet deserving of the name, but from near Boorhanpore there is no real Line, the wild country being watched after a fashion by three small parties, each 16 miles apart.

FINANCIAL RESULTS.
GROSS REALIZATIONS,

77. The gross realizations for the past year in this division amounted to Rs. 1,16,063, being more than 21 per cent. below those for the preceding corresponding 12 months. Compared with some previous years the decrease is still greater, but to explain this falling-off, it will be necessary to exhibit some:—

Details of the gross realizations of the Hoshungabad Division for 1867-68 *and preceding corresponding* 12 *monthly periods.*

compared with those of preceding years.

Year.	Salt.	Sugar.	Miscellaneous.	Total.
	Rs.	Rs.	Rs.	Rs.
1867-68 ...	97,827	12,981	5,255	1,16,063
Corresponding 12 months of 1866-67 ...	1,31,770	9,044	7,290	1,48,104
Do. do. 1865-66 ...	1,06,743	16,410	5,933	1,29,086
Do. do. 1864-65 ...	2,15,185	9,536	6,874	2,31,595

It will be observed that while in sugar there is, notwithstanding serious oscillations, no very marked evidence of a falling off in the trade in salt, the diminution has been unmistakeable and important.

Salt.
Decrease.

78. I have already in the Saugor Divisional Review explained the causes to which the decrease of revenue in this portion of the Line is due. The Railway is already open to Beer; in a short time it will be open to Hurda, already the cheap and good Kokan from Bombay is displacing the somewhat superior, but now more expensive, Kansia and Burragura salts, and in a short time it will confine the use of these to the wealthy few. There has been no real diminution in the amount imported, but as the rowannahs

for Kokan are mostly issued at Nagpore or Kullian, the Nagpore* Division obtains credit for the whole, and Hoshungabad exhibits a corresponding decrease.

Detail of the various descriptions of Salt imported.

79. Several descriptions of salt are imported into this division, as will be seen from the following:—

Detail in maunds of different descriptions of salts imported across the Hoshungabad Division.

Year.	Sambhur.	Kansia.	Kokan.	Burragura.	Kokan and Bhooskie mixed.	Miscellaneous.	Total.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
1867-68	96	22,782	12,009	4,018	1,713	4	40,622
Corresponding 12 months of 1866-67	255	21,508	25,251	15,139	1,961	4	64,118
Do. do. 1865-66	1,184	30,946	2,988	2,579	254	414	38,365
Do. do. 1864-65	69	41,100	18,553	921	1,578	19,244	81,465

Of Sambhur little is here imported. Puchbuddra was always the staple of this division, and this has steadily decreased owing to the increased consumption of Kokan. True, that according to the divisional figures above given, there appears to have been a decrease in Kokan also, but this is owing to our present system of account, already commented on (*vide* paras. 64, 65, General Review) whereby each division receives credit as imports, only for such salt as has paid duty at its Collectorate. In reality the increase in Kokan, which has gone to swell the realizations of the Nagpore Collectorate, at which most of the principal traders reside, has been very considerable. In the import of Burragura, a very fine salt from the Runn of Cutch, second only to Kansia in quality, great fluctuations will be observed. There is no regular trade in this yet, (though with the Deesa Line there may some day be) and its advent as a return freight depends upon the movements of grain, cotton and the like. Bhooskie salt for one year (1864-65) when the old Line ran by Seonee, Cherapatta and Checholee, and the duty was only Rs. 1-8, was paid for in great quantities at Hoshungabad, (it is shown under miscellaneous) but no very large amount ever actually crossed the Hoshungabad Line, and it was too poor a salt to pay Rs. 3 per maund, to which the duty was raised in 1866, and compete with Rajpootana or Kokan, even before the completion of the rail to Boorhanpore; at present only a little Bhooskie mixed with Kokan finds its way into this division.

Sugar.

80. The sugar trade of this division, never very great, is subject to remarkable fluctuations, as will be seen from the following:—

Detail of Sugar (in maunds) crossing the Hoshungabad Division.

Year.	Refined.	Unrefined.	Total.
	Mds.		Mds.
1867-68	12,981	.....	12,981
Corresponding 12 months 1866-67	9,044	.....	9,044
Ditto ditto 1865-66	16,410	.....	16,410
Ditto ditto 1864-65	9,536	.....	9,536

* Rs. 36,160 representing 24,106 maunds was realized at Nagpore on account of trade passing the Hoshungabad Line.

OF THE IMPERIAL CUSTOMS LINE FOR THE OFFICIAL YEAR 1867-68.

Fluctuations.

No tax is at present here levied on unrefined sugar, and we have, therefore, no record of the trade in this, but refined sugar comes here both from Bombay and Mirzapore. Bad and good seasons in either the east or the west, cheap and dear carriage on either side, have determined the proportions in which sugars have come from either quarter. The past year having been a peculiarly good season in the east, and the rail to Jubbulpore having afforded new facilities for transport, the eastern sugar trade has considerably revived in Hoshungabad. Of course, Bombay sugars, being imports into our own territory, paid no duty on crossing the Line, from west to east, and by a departmental oversight, they were allowed to *re*-cross our Line in considerable quantities into Bhopal, &c., *free* of duty. As they were then *bonâ fide* exports of British saccharine produce, passing *into* foreign territory for consumption *there*, this was clearly an error which I have since rectified. But heretofore, owing to this mistake, our sugar revenue in Hoshungabad has depended not on the amount of our exports, but on the proportion in which these were composed of eastern and western sugars. Besides this, when eastern sugars were dear and scarce, Bombay sugars stopping at Bhoosawul have occasionally, it is said, gone up in small quantities outside our Line through Holkar's territories; but this Line presents so many impediments physically and in consequence of the wild nature of the people and the exactions of native chieftains, that I am assured that even Bombay sugar will continue to come up by rail to Khundwa, when the rail serves to Hurda and Hoshungabad, and pay duty to cross our Line as an export to Bhopal, Indore and Oojein, rather than leave the rail at Bhoosawul and thus avoid our duty.

Miscellaneous.

81. Of miscellaneous revenue and its fluctuations, no detailed explanation is necessary. Consisting almost exclusively of fines and forfeitures, first credited under this head, and subsequently on distribution to informers and the establishment, debited under miscellaneous charges, the total only varies from a little above Rs. 5,000 to a little above Rs. 7,000.

CHARGES.

82. The charges of the Hoshungabad Division amounted in 1867-68 to Rs. 1,05,392, which may be thus contrasted under the principal heads of expenditure, with those of previous corresponding periods:—

Detail of charges for the past and three preceding years.

Details compared with those of previous years.

Year.	Fixed.	Contingencies.	Petty constructions and repairs.	Total.
	Rs.	Rs.	Rs.	Rs.
1867-68 ...	88,127	17,265	.....	1,05,392
Corresponding 12 months of 1866-67 ...	1,15,073	16,392	.....	1,31,465
Do. do. 1865-66 ...	89,372	12,374	.....	1,01,746
Do. do. 1864-65 ...	90,819	10,720	.....	1,01,539

The great diminution in the fixed charges is chiefly due to the transfer, early in 1867, of the three beats of Paloha, Saen Khera and Oomerdha to the Saugor Division, in compensation for the increase in the preceding year 1866 due to annexation to the Hoshungabad Division of the Nimar Local Line. I may here note, that this transfer of the three beats has not been alluded to, as having very materially influenced the revenue of either division,

because duty on goods, crossing in them, has continued to be paid for in the same proportion as before, at the two Custom Houses. The variations in contingent charges, depending chiefly on the amount of rewards, fines, &c., distributed, call for no special notice.

NET REVENUE

83. The net revenue for this division amounted in 1867-68 to only the sum of Rs. 10,670, which is compared in the following table, with that of preceding years:—

compared with that of preceding years.

Year.	Gross Realization.	Charges.	Net Receipts.	Percentage of charges on gross realizations.
	Rs.	Rs.	Rs.	
1867-68	1,16,063	1,05,393	10,670	90·80
Corresponding 12 months of 1866-67	1,48,104	1,31,465	16,639	88·76
Do. do. 1865-66	1,29,086	1,01,746	27,340	78·72
Do. do. 1864-65	2,31,595	1,01,539	1,30,056	43·45

The causes of the decrease of the gross, and hence of the net revenue also, have already been touched upon; no one must think that the utility of this or any other single division or group of divisions can be guaged by its net revenue. Hoshungabad is daily becoming more and more of a preventive division; even in old times the Seonee Imperial and Nursingpore Local Lines, which it represents, only paid their expenses, and the extraordinary income of 1864-65, which will have been noticed in the above table, was due to the accident of over Rs. 80,000, which should have been paid in the Wurdah Division, having been paid in at Hoshungabad. The net receipts of this division, moreover, are not already quite so small as they seem, because Nagpore, owing to our present system (General Review, paras. 64, 65) obtains credit for a considerable portion of them, but even were they what they seem, were they *nil*, did the division fail to pay its own expenses, it would still be a necessity. Abandon it, and not only would the revenue of Saugor, Jhansie and Nagpore almost disappear, but that of Agra and Delhi would decline, and even that of Bengal suffer. The percentage of cost on collections is enormous, but were it 150 instead of 90 per cent., this, *taken by itself*, would form no sort of criterion for measuring the value of the division to the State or the necessity of maintaining it.

COURSE OF TRADE.

Salt.

84. In past times this division was supplied with Bhooskie salt for the poor, and Kansia and Burragura for the well-to-do and wealthy. Too far south, but little Sambhur ever came down here, the Saugor Division being the limit in this direction of that staple. The levy of full duty on Bhooskie, and the progress of the Railway, led to Kokan salt superseding Bhooskie, far superior in quality and nearly as cheap; it has steadily enlarged its area of distribution, and as the rail opens further and further, and so increases its cheapness, as compared with the Bunjarah-carried Kansia, no doubt can exist that, except where the wealthy are concerned, it will entirely displace the latter, and *à fortiori* Burragura salt will cease almost entirely to cross the Hoshungabad Line, but none the less will its maintenance be necessary; once open its posts and the Rs. 3 bonus, thus given to Rajpootana, Bunjarah and cart-borne salts would enable them in their turn, to displace Kokan without contributing a rupee to our revenue.

OF THE IMPERIAL CUSTOMS LINE FOR THE OFFICIAL YEAR 1867-68.

Sugar.

85. Besides this, our sugar revenue is likely here to increase. Heretofore the exports of this division have, as above explained, been derived from both Mirzapore and Bombay, sugar from the latter by an error having been allowed to pass free. This has now been rectified, and there will undoubtedly be an increase in the revenue; sugar intended for Indore, Oojein, Bhopal, &c., whether derived from Bombay or Mirzapore will, when the rail opens to Hurda, cross our Line to go to these places. Looking merely to the map, it may seem that Bombay sugar would stop short at Bhoosawul, and so run up outside our Line, but in practice this is said to be hazardous, and rather than tempt this dangerous route $\frac{9}{10}$ths of the sugar will cross our Line, and pay duty on re-export. Much has been said about the Bombay sugars here, driving those from Mirzapore out of the field; for my part, I see no grounds for believing it; with the rail only as far as Jubbulpore,* a good season in the East enabled Mirzapore to re-conquer much of the ground it had lost to Bombay, though the produce of the latter was most inequitably enjoying a premium of Re. 1 per maund. During this past year, the prices of similar qualities of Bombay sugar at Boorhanpore, and of Mirzapore sugars at Hoshungabad, were as nearly as possible the same. Now, however, that as exports from British into foreign territories, all sugars, no matter whence derived, have been placed on an equality as far as duty is concerned, it strikes me, that when there is an unbroken line of rail from Mirzapore to Hoshungabad, Bombay sugars will, unless their present prices can be largely reduced, fall rapidly into the background.

86. That the opening of the rail, and influx of eastern raw sugars, will compel us to tax these in this division as elsewhere, is to me obvious, but this subject has been already discussed (Central Provinces' Sectional Review, para. 19) and need not here be further insisted on.

SMUGGLING.

87. There has not been much smuggling in this division during the past year; wild beasts, and an equally wild country, in many places, entirely prevent attempts at smuggling by night, and though, owing to the weakness of the Line, head-loads are constantly run, the aggregate amount so introduced is not, thanks to the exertions of the men and officers, by any means considerable. The people, too, are a different class to those in Saugor; more fearful in offending against the laws, better off and better conducted it is said. The temptation, too, is not nearly so great; cheap Kokan being plentiful below Line. Had the rail been open to Nursingpore, we should never have had the burst of smuggling, which in Saugor, temporarily, followed the diversion into other channels of the Bunjarah trade, and that we *had* the rail open some 20 miles beyond Khundwa, may partly explain (and if so the indication is *most important*) the comparatively manageable character of the smuggling in this division.

PENAL ACTION OF THE DEPT.

Persons.

88. Altogether 162 persons were apprehended in this division during the past year for breaches of the customs laws, against 145 so arrested in 1866-67. Of these 162 persons, 55 were released by the Department on payment of single or

* Four thousand one hundred and sixty-eight maunds of sugar were sent from Allahabad and Mirzapore by rail to Jubbulpore between the opening of the rail in August and the close of the official year.

double duty, and the remainder were committed. The result of trials in both years may be thus shown :—

Persons committed for trial.		Persons acquitted by the Courts.		Persons convicted by the Courts.		Percentage of convictions on committals.	
1866-67.	1867-68.	1866-67.	1867-68.	1866-67.	1867-68.	1866-67.	1867-68.
145	107	4	3	141	104	97·24	97·2

Of the 104 persons convicted, 4 paid fines, averaging Rs. 13 each, and 100 underwent imprisonment, for terms averaging considerably below one month. Again, I am compelled to remark that the extreme leniency of such sentences cannot but defeat, in a great measure, the object of these prosecutions and punishments.

Goods

89. Besides criminal prosecutions, the confiscation of 239 maunds of goods valued at Rs. 700, and the levy of double duty, to the extent of Rs. 672, were enforced by Revenue Commissioners on the recommendation of this Department. Altogether 244 such recommendations were made, out of which 243 were finally approved by the Commissioners.

HEDGE.

90. Of the hedge, I regret to say that, all I have to record is, that there is *none*, although it is urgently required in the upper portion of the division, and although, as far as I see, no peculiar difficulties had here to be contended with. The late Collector, Mr. Douglas, cannot, I think, be quite absolved of neglect in this matter. Stringent orders have now been issued, and the present Collector may, I believe, be fully relied on to have them executed.

OFFICERS.

91. Mr. E. C. Nunn, the present Collector, has been throughout the past and many preceding years, one of the very best Patrols on the Line, and as such, I would prominently notice him. I entertain no doubt that, as Collector, he will maintain the high reputation he has ever held. Of the subordinate Officers, Mr. McCheane and Mr. Huckstepp seem, all things considered, best to have deserved special notice. Mr. Ives, who has been repeatedly in charge of the Collector's office, may also be said to have done well on the whole.

THE WURDAH OR NAGPORE DIVISION.

NAGPORE DIVISION.
Line.

92. The Nagpore Division, the 9th of the Imperial Line and 3rd of the Central Provinces' Section, commences at the Goongal River (which there forms the boundary of Baitool) some 62 miles west of Atnair, and traversing portions of the Baitool, Chindwara, Nagpore, Wurdah, and Chanda Districts, terminates at the Nundgaon frontier, 10 miles east of Ambagurh.

Its course.

93. The line runs through or near to Atnair, Putton, Bungaon, Julal Khera, Ashtee, Arvee, Kowta (Phoolgaon) Pohna, Wurora, Chanda, Dhaba, Chamorsee, Wyragurh and Ambagurh, and at each of these places, with the exception of Dhaba and Chamorsee (and there too we urgently require them), we have a Patrol or Assistant Patrol posted. The total length of the Line in this division is 468½ miles, but of this for the first 80 and last 220 miles, the Line is a mere skeleton. Besides the posts above enumerated, this division has two outlying posts, at Kullian and Boree Bunder, (Bombay) for receiving duty and checking the despatch of rail-borne Kokan salt.

OF THE IMPERIAL CUSTOMS LINE FOR THE OFFICIAL YEAR 1867-68.

FINANCIAL RESULTS.
GROSS REALIZATIONS.

94. The gross receipts of the Nagpore Division for 1867-68 amounted to Rs. 5,48,557, a sum largely in excess of those for any of the two previous years, during which this Line has been in existence. The details for all three years are as follows :—

Detail of gross Realizations of the Nagpore Division.

Year.	Salt.	Sugar.	Miscellaneous.	Total.
	Mds.	Mds.	Mds.	Mds.
1867-68	5,31,447	10,881	6,229	5,48,557
Corresponding 12 months of 1866-67...	4,13,142	12,140	7,856	4,33,138
Do. do. 1865-66...	4,92,472	17,254	9,482	5,19,208
Do. do. 1864-65...	(Line only in existence for 3 months.)			

Details compared with those of previous years.

It will be seen that in sugar there has been a slight decrease, while in salt the revenue has not only exceeded that of 1866-67 by fully 28 per cent., but has even surpassed that of 1865-66 by 8 per cent., and the imports of this latter year, the first after the establishment of the Line, were in many respects exceptional.

Salt.

95. The increase in the present year's salt imports, as compared with those of the preceding corresponding 12 monthly periods, exceeds 86,000 maunds, and as compared with those of 1865-66, exceeds 47,000 maunds. The increase in *quantity* therefore, *viz.*, 32 and 15 per cent. respectively, exceeds the increase in duty, and this is due to a diminution in salt paying a duty of Rs. 3 per maund (which salt has in fact almost entirely ceased to cross the Line), and a more than corresponding increase in salt that pays only Rs. 1-8 a maund.

Increase.

96. That the great increase in the quantity of salt imported *viâ* Nagpore, during the past year, is chiefly due to increased facilities of transport consequent on the completion of the railroad, enabling Kokan to supersede Sambhur and Kansia in wide tracts of country formerly supplied with these across the Saugor and Hoshungabad Divisions, admits, as explained when reviewing these latter, of no sort of doubt. Other minor causes have, however, contributed to swell this increase. Bhooskie salt has been completely shut out. Ganjam salt has had to retreat somewhat further east, while of the Muchlee Bunder or Masulipatam salt that used to come up *viâ* Warangal to Chanda, Wyragurh and Ambagurh in considerable quantities, only a few maunds now appear at the latter post. Lastly, a variety of causes, bankruptcies, disputes about dryage allowance, &c., which need not here be recapitulated, combined to depress the imports of 1866-67 slightly below their normal level.

Detail of quantities of Salt of different descriptions.

97. The quantities of salts of different descriptions, imported during the three years the Line has been in existence, are exhibited in the following table :—

Detail in maunds of Salts of different descriptions imported across the Nagpore Division.

Year.	Detail of Sorts.			Total.
	Kokan.	Bhooskie.	Miscellaneous.	
	Mds.	Mds.	Mds.	Mds.
1867-68	3,49,515	2,388	3	3,51,906
Corresponding 12 months of 1866-67	2,56,281	9,572	2	2,65,855
Do. do. 1865-66	2,76,324	23,965	4,059	3,04,348
Do. do. 1864-65	Line only in existence during 3 months.			

There is now virtually only one import, Kokan salt, derived from Oorun, Panwell, Matoonga and other works in the neighbourhood of Bombay.

Sugar.

98. The export of refined sugar, (which alone we here tax, or consequently have any certain knowledge of) never of any importance in this division, has fallen off by about 6,500 maunds since we first laid down the Line, as will be seen by the subjoined table.

Detail of Sugar (in maunds) crossing the Nagpore Division.

Year.	Refined.	Unrefined.	Total.
	Mds.	Mds.	Mds.
1867-68... ...	10,881	...	10,881
Corresponding 12 months of 1866-67 ...	12,140	...	12,140
Do. do. 1865-66... ...	17,254	...	17,254
Do. do. 1864-65... ...	...	...	...

Decrease.

99. The cause of this falling-off is obvious,—Bombay sugars, consisting of date palm, Mauritius and sea-borne Bengal, obtaining facilities of carriage, denied as yet to those of Mirzapore and other eastern marts, have pushed up and occupied tracts of country formerly supplied by the latter. The completion of the rail from Allahabad to Bhoosawul will probably readjust the balance, if not in the Nagpore Division itself, at any rate in the Central Provinces as a whole.

Miscellaneous.

100. Our miscellaneous revenue, which, so far as results to the Imperial Exchequer are concerned, is nominal (consisting chiefly of fines, forfeitures and the like, ultimately distributed to informers and the establishment), appears to need no further comment.

CHARGES.

101. The charges of the Nagpore Division for 1867-68 amounted to Rs. 1,59,680, being slightly in excess of those for the preceding years. Examining the details, it will be observed that there has been a great decrease in contingencies, but a considerable increase in the cost of the fixed establishment.

Details.

Detail of charges for the past and three preceding years.

Year.	Fixed.	Contingencies.	Petty constructions and repairs.	Total.
1867-68	1,32,842	26,838	...	1,59,680
Corresponding 12 months of 1866-67	1,22,133	31,253	500	1,53,886
Do. 1865-66	1,16,893	41,096	...	1,57,989
Do. 1864-65	(Line only in existence during three months.)			

The increase in fixed charges, is due to the establishment of posts at Kullian and Boree Bunder, which have materially facilitated trade (*vide infra*), and of a sugar tulashee post at Nagpore for the levy of duty on sugar exported by rail from the Central Provinces.

102. In contingencies the reduction results from the absence of various extraordinary charges connected with the establishment of the Line, from the receipt of stationery (formerly purchased in the bazar) through the Government Superintendent, and from other minor causes that need not here be noticed.

OF THE IMPERIAL CUSTOMS LINE FOR THE OFFICIAL YEAR 1867-68.

NET REVENUE.

103. The net receipts of this division amounted in 1867-68 to Rs. 3,88,877, and as may be seen from the subjoined table, exceeded those of either of the previous years.

Year.	Gross Realizations.	Charges.	Net Receipts.	Percentage of charges on gross realizations.
	Rs.	Rs.	Rs.	
1867-68	5,48,557	1,59,680	3,88,877	29·10
Corresponding 12 months of 1866-67	4,33,138	1,53,886	2,79,252	35·52
Do. do. 1865-66	5,19,208	1,57,989	3,61,219	30·42
Do. do. 1864-65	(Line only in existence for three months.)			

Of course with an increased income, the percentage of cost on collections has diminished, but, as elsewhere remarked, no inferences can be safely drawn from this percentage in any single division or section.

COURSE OF TRADE.
Salt.

104. As has already been noticed the Berar or Bhooskie salt, once the staple of consumption of large sections of the poorer classes, resident in rear of our present Nagpore Line, has been completely driven out since the enhancement of duty payable by it, and the opening of the Railway, by the superior Bombay produce. A similar fate has befallen the Masulipatam or Muchlee Bunder salt, once brought up in considerable quantities by Kummumet, Warangal and Chinoor, by the Bunjarahs to the eastern posts of the division. It is not only the superiority of Kokan that has crushed this latter trade. As in Saugor, the resumption by grants of waste lands, so here, the grazing tax has driven the Bunjarahs out of the field. At present they still hold their own further east, where scarcely any other form of carriage can come into competition with them, but even there, this tax is seriously affecting their trade. Plentiful fodder, free of charge, being the very essence of their operations, (Central Provinces' Sectional General Review, para. 38) Kokan salt, rail-borne, is now virtually the only import of this division. It is all made in the neighbourhood of Bombay, and it is either loaded at the Boree Bunder or Kullian Stations, and brought direct into Nagpore; or, having been previously brought from these stations into Berar, is again, when fluctuations of price render it profitable, re-loaded at one of the Berar stations, and sent into Nagpore. Of course, when this latter course is adopted, the Nagpore Division receives credit for the duty on the salt thus transmitted to it out of the Berar collections. The objects of establishing posts at Kullian and Boree Bunder were—*first*, the convenience of the duty-paying traders, many of whom reside in Bombay; and *second*, an avoidance of detention to Railway trains crossing our frontier, which, but for arrangements that the presence of responsible officials of our own, at the two great lading stations, enables us to make with the Railway officials, must have been searched before being allowed to proceed. It is satisfactory to be able to state that these arrangements, which I revised some few months ago, are now working perfectly satisfactorily, both to the Railway authorities and the traders, and that during the year nearly 4 lakhs of Rupees have been paid in, by traders at our two Bombay posts.

105. It has been suggested, that the Bombay officials should be entrusted with the task of levying our duty (at the same time

as their own) on salt sent up by rail from Bombay, but under the existing Bombay system, this would be fatal to the interests of Government. According to our notions, no real check against smuggling exists at the various extensive works in the neighbourhood of Bombay. A vast quantity of the salt sent up by rail has never, I was assured, paid *any* Bombay duty, and it is a notorious fact that up to March of the present year, excellent salt could be purchased in Bombay itself at Rs. 1-7 per maund, or one anna a maund *less* than the mere *duty* this salt was supposed to have paid.

106. How greatly the advent of the Railway has changed the course of trade is exemplified, amongst other things, by a comparison of the receipts of duty on salt *before* and since this commercial epoch. Formerly, directly the monsoon set in, the salt trade collapsed, only to revive with the cold weather; now, it is nearly as brisk during the rains as at any other season.

Thus in June 1866	only Rs.	7,101	were realized as	duty against	Rs.	42,793	in June 1867.
July	„	„	1,496	„	„	„	11,130	„ July	„
August	„	„	586	„	„	„	9,656	„ August	„
September	„	„	507	„	„	„	5,369	„ Sept.	„
October	„	„	6,319	„	„	„	48,650	„ October	„

Sugar.

107. North-West or Mirzapore sugars, brought by rail to Jubbulpore, and thence by road to Nagpore, are chiefly exported thence by rail, and are weighed and pay duty at the special post maintained at the Nagpore Station. The trifling extra expenditure entailed by the maintenance of this post, is amply repaid us, in the entire obviation thus rendered possible of all hindrance to railway trains crossing our Line westward. How far the completion of the rail, from Allahabad to Bombay, will affect the sugar trade of Nagpore may be doubtful (my own impression is, that it will extinguish it by bringing North-Western sugars into Berar *viâ* Bhoosawul); but that it will largely increase that of the Central Provinces generally, can scarcely be doubted.

SMUGGLING.

108. Smuggling is not of an aggravated character in the Nagpore Division. In the Atnair beat a good deal of petty smuggling goes on, but as we come down by Julal Khera, Ashtee and Arvee we get into a rich cotton field, where the people are particularly amenable to law, and it is said more than ordinarily friendly to our establishment. Further east again, there is petty smuggling, but as a whole, considering the weakness of the Line, there is less smuggling than might have been expected.

109. This refers to the Division itself, but there is reason to fear that much smuggling goes on through the extraordinary gap that has been allowed to remain in our Line. The Nagpore Division ends on the western borders of Nundgaon, the territory of a feudatory Chief, while the Raipore Line begins 10 miles off on the eastern boundary of the same territory. Here is a clear gap through which every one may introduce as much salt as they like free of duty. An alteration of Line, which would prevent the necessity of such a gap, was proposed early in the year by the Deputy Commissioner, in a memorandum submitted to the late Chief Commissioner, but sanction has not yet been received to the proposed movement, which cannot now be effected till after the rains.

PENAL ACTION OF THE DEPT.
Persons.

110. Altogether 316 persons were detected in breaches of the customs' laws during 1867-68, against 347 in the preceding year. Of these 213 only were released by the Department, on payment

of single or double duty against 278 in 1866-67. The rest were prosecuted, with what results the following table will show :—

Number of persons committed.		Number of persons acquitted by the Courts.		Number of persons convicted by the Courts.		Percentage of convictions on committals.	
1866-67.	1867-68.	1866-67.	1867-68.	1866-67.	1867-68.	1866-67.	1867-68.
69	103	17	10	52	93	75·36	90·3

Two persons of those convicted paid fines, aggregating Rs. 33, the remainder, 91 in number, underwent imprisonment—36 for 15 days and other periods less than one month; and 55 for one month and periods less than two.

Goods.

111. Besides penalties inflicted by the Criminal Courts, the confiscation of 752 maunds of goods, valued at Rs. 1,700, and the levy of double duty to the amount of Rs. 2,287, was enforced by the Revenue Commissioner on the recommendation of the Departmental Officers. Of 217 such recommendations 202 were approved, and 2 negatived, 13 remained undisposed off at the close of the year.

HEDGE.

112. The hedge has, I consider, been neglected in this Division. There are considerable portions of this Line in which, with posts 5 and 6 miles apart, and the Line a mere footpath through a dense forest, no hedge was possible; but there are other portions, in which a hedge might easily be brought to perfection, and where, in consequence of the Collector and his subordinates having chosen to conclude, that the Line was about to be immediately removed, due attention has *not* been paid to this important matter. I need not say that this inactivity has been censured, and that there is now every prospect of improvement. At present, a hedge forming, as a hedge should, an impassable barrier against the passage of smugglers, until these latter deliberately set to work to cut it down or remove it, is, I fear, unknown in the Nagpore Division, although an apology for one exists in many beats.

OFFICERS.

113. Mr. Martin, the Collector of Nagpore, has done a *great* deal of good work during the past year, and has, moreover, worked *zealously* under the disadvantage of continued ill-health, which has since compelled him to take sick leave. Under these circumstances, although he has sent in a very indifferent report; although there have been many things in this Division by no means as they ought, and although his supervision over his subordinates has been (perhaps necessarily) lax in many matters, he must, on the whole, I think, so far as I am at present advised, be pronounced to have done well. Of the subordinate Officers, Messrs. Cosserat, J. D. Young and Ahmudoollah Khan, Patrols; and Paxton, Ashgur Ally Beg, and Asudoollah Khan, Assistants, have also, on the whole, worked very satisfactorily.

RAIPORE DIVISION.

RAIPORE DIVN.

Line.

114. The Raipore Division, the last of the Central Provinces' Section and of the whole Imperial Line, commences at present on the frontier of Nundgaon in the Raipore District, some 62 miles west of Dhumturee, and running through the Raipore and Sumbulpore Districts, terminates at Sama Singha, some 36 miles north-east of Sumbulpore on the borders of Bamra.

Its course.

115. The Line runs by Dhumturee, Arung, Sankra, Sohella and Sumbulpore, at each of which a superior Officer is posted, and is 289 miles in length. For the first 130 miles it is a mere skeleton, while the remainder has peons' posts every three miles.

FINANCIAL RESULTS.
GROSS REALIZATIONS.

116. The gross realizations of the Raipore Division for 1867-68 amounted to Rs. 2,88,764, or 13¼ per cent. below those of the preceding year, although, as will be seen from the subjoined table, they were nearly 135 per cent. in excess of those of 1864-65, the first complete year of this Line's existence.

Details compared with those of previous years.

Detail of gross realizations of the Raipore Divisions.

Year.	Salt.	Sugar.	Miscellaneous.	Total.
	Rs.	Rs.	Rs.	Rs.
1867-68	2,72,862	454	15,448	2,88,764
Corresponding 12 months of 1866-67	3,16,635	388	9,996	3,27,019
Ditto of 1865-66	1,19,943	319	2,838	1,23,100
Ditto of 1864-65	(Line not in existence.)			

Salt.

117. The only material source of revenue in this Division is salt, exports are merely nominal. In salt, the fluctuations during the three years that the Line has been in existence, have been very great, the fact being, as I believe, that the imports of the first year were abnormally small; of the second, somewhat *larger* than could be expected as an average; and of the third, *below* this average. The Line was laid towards the close of the trading season of 1864-65. Up to May 1865 the Chutteesgurh salt revenue had been farmed out for 1¼ lakhs per annum. When the contract was drawing to a close, and the farmer learnt that the lease would not be renewed, he made most strenuous exertions to get in as much salt as possible, sending agents out to hurry in Bunjarahs under promise of some reduction in the authorized scale of duty. Unusual supplies were consequently poured in, and very considerable stocks accumulated below Line. This, and the natural dread which the ignorant Bunjarahs at first had of venturing within reach of our newly established Line, greatly depressed the realizations of 1865-66. Of course the natural consequence, a brisk demand for salt, followed, in 1866-67, the short supply of its predecessor. The Bunjarahs, encouraged by the demand for grain in the famine-stricken districts, went off in large bodies, carrying grain for which they brought back salt in return, their numbers being swelled by the advent of "Tandas" formerly plying between Nagpore and Bombay, and driven thence by the opening of the rail. It resulted that somewhat superabundant stocks were received, and an unexpectedly large revenue realized.

118. The past year had to contend with more than one difficulty—1*st*, there were considerable stocks in hand; 2*nd*, smuggling has been decidedly on the increase; 3*rd* on the west Kokan began to trespass on tracts heretofore supplied with Bunwar, the sole import of this Division; 4*th*, on the east unusually large despatches rounded our terminus, and supplied portions of the country that in the previous year drew their supplies across the Line. What the salt which thus escaped our duty really was, is far from certain. No officer could be spared to go down the Mahanuddee to Nagur Kanta, Cuttack, Pooree, the Chilka Lake and Ganjam, and thoroughly sift the matter; and enquiries at Sumbulpore, Calcutta and other places led to discrepant conclusions. One set of

traders affirm that this is illicitly-made Pooree and Chilka Lake salt, others that it is Madras salt, while a third party aver that it is Bengal salt, obtained from the golahs at Pooree for Rs. 1-10 a maund. I incline to believe that both the former descriptions get into the Tributary Mehals, and thence chiefly *viâ* Bamra, pass in rear of our Line. In many respects the new proposed terminus at Jhoojoomera will place us on a better footing than we now are, but the only real remedy is the extension of our Line to the sea coast.

119. Besides the causes of decreased imports above enumerated, there is reason to believe, that getting better acquainted with our laws, and the restrictions under which the Department necessarily and rightly is compelled to act, the Bunjarahs have grown bolder, and that, as I shall notice under that head, there has been some increase in smuggling, from the first even, of formidable extent in this Division.

Detail of descriptions imported.

120. As will be seen from the following table, the only salt imported across this Division, is Bunwar or Madras coast salt. We possess no very precise information as to the exact sources of this salt, but it is said to be brought from the neighbourhood of Ganjam, and to be manufactured at or near Itchapore, Nawapara, Bumaleegora, &c. During the first year some Kokan and Masulipatam salts were also imported through the western posts of this Division, but these descriptions no longer make their appearance.

Detail in Maunds of Salt of different descriptions imported across the Raipore Division.

Year.	Bunwar.	Miscellaneous.	Total.
	Mds.	Mds.	Mds.
1867-68 ...	1,81,908	.....	1,81,908
Corresponding 12 months of 1866-67 ...	2,11,090	.....	2,11,090
Do. do. 1865-66 ...	71,810	5,786	77,596
Do. do. 1864-65 ...	.....	.....	.....

Sugar.

121. There is no real sugar export trade in this Division, although a little sugar goes to fairs outside our Line, and so pays duty. Only refined sugar here, as elsewhere in the Central Provinces, below Paloha of Saugor, is taxed. The quantities, such as they are of this, that passed the Line in each of the three years the Line has been in existence, are shown in the subjoined table :—

Detail of Sugar (in Maunds) which crossed the Raipore Division.

Imports in past and preceding years.

Year.	Refined.	Unrefined.	Total.
	Mds.	Mds.	Mds.
1867-68 ...	454	.....	454
Corresponding 12 months of 1866-67 ...	388	.....	388
Do. do. 1865-66 ...	319	.....	319
Do. do. 1864-65 ...	(Line not	in existence.)	

Miscellaneous.

122. Miscellaneous revenue, proceeds of confiscated and smuggled goods, fines and the like have increased. The first year, of course, great leniency was exercised, and little realized

under this head, while the strengthening of the Line early in 1867 has contributed to increase seizures largely, in the past year.

CHARGES.

123. The total charges of this Division amounted during the past year to Rs. 65,963, being, as will be seen from the subjoined statement, considerably in excess of those of previous years.

Detail of Charges for the past and three preceding years.

Details compared with those of past years.

Year.	Fixed.	Contingencies.	Petty constructions and repairs.	Total.
	Rs.	Rs.	Rs.	Rs.
1867-68 ...	44,763	21,200	.....	65,963
Corresponding 12 months of 1866-67	38,094	16,109	.....	54,203
Do. do. 1865-66	25,163	8,746	.....	33,909
Do. do. 1864-65	.....	.....	.....	.....

During 1865-66 the full establishment was not maintained for more than a portion of the year, hence the increase in fixed charges in 1866-67. The further increase under this head, in the past year, is due to the increase of establishment in February 1867, when posts were laid down at every three miles between Sankra and the Eastern terminus. In contingencies the increase is due to an increase in the amount of goods seized and penalties levied, &c., which, after being credited as above noticed, under miscellaneous revenue, is, on distribution to informers, &c., debited under contingencies.

NET REVENUE

124. The net revenue of the Division amounted for 1867-68 to Rs. 2,22,801, which is contrasted in the sub-noted table with that of previous years.

compared with that of preceding years.

Year.	Gross Realizations.	Charges.	Net Receipts.	Percentage of charges on gross realizations.
	Rs.	Rs.	Rs.	
1867-68 ...	2,88,764	65,963	2,22,801	22·83
Corresponding 12 months of 1866-67	3,27,019	54,203	2,72,816	16·57
Do. do. 1865-66 ...	1,23,100	33,909	89,191	27·54
Do. do. 1864-65 ...	(Line not in existence.)			

Income having diminished, and charges increased, from causes already explained, the percentage of costs on collections has of course risen, but, as has so often been remarked, nothing for or against any single Division can be inferred from the percentage of its charges on its revenue. Sirsa, at the opposite extremity of the Line, is fully as important and essentially necessary a Division as Raipore, but it exhibits a percentage of no less than 88 against less than 23 in Raipore.

COURSE OF TRADE.

125. The great majority of the imports of this Division are brought in by Bunjarahs as return freight for grain, cotton, and I believe, lac, taken down by them to the coast. Grain has, for the last two or three years at least, been the main staple of their trade,

and for this the natural return is salt. To one post, that of Sumbulpore, much of the salt imported comes by boat up the Mahanuddee from Binka and other depôts. Although this is all locally called Bunwar, a portion of it is alleged to be Cuttack salt, sold from the Government golahs at Pooree and elsewhere; but this appears to me doubtful. I have been unable to learn (though such *may* be the case) that any Bengal salt is sold below the full duty rate, and this salt is said to be purchased at Rs. 1-10 a maund at Pooree and Cuttack. My opinion is, that this is smuggled salt, illicitly manufactured on both the Madras and Bengal Coasts, and I most earnestly recommend that *here at any rate*, if not, as recommended in the General Review, in the case of Kokan also, we be allowed to charge full duty on all salt imported, unless covered by Madras rowannahs; and that to ensure the greatest care in the issue of such rowannahs, we be authorized to obtain from Madras a transfer refund of the whole duty represented by such rowannahs. *There is no other system by which serious loss to the Imperial revenue can be prevented. At present I am convinced that Government is seriously defrauded.*

126. Of salt depôts above Line in the neighbourhood of this Division, Binka, already mentioned, Barpalee, Bedom and Borasambhur appear the principal. Licit and illicit trade from the former three cross in the Sumbulpore and Sohella beats, and from the latter in Sankra, while Arung and Dhumturee appear to be supplied from numerous villages outside of jurisdiction, none of which seem to be noted as salt depôts.

SMUGGLING.

127. Smuggling in the Raipore Division has been very rife during the past year. Elsewhere on the Imperial Line, (even at Saugor, where it has been troublesome to a degree,) smuggling has a pettiness of character that prevents it, when fairly watched, from seriously injuring the revenue. Ventures may be numerous, but they are without exception head-loads; from 30 to 45 seers are the most that cross at a time, and the aggregate weight smuggled across in the whole year can never be great. In Raipore, however, the evasion of the revenue assumes formidable dimensions. A skeleton Line, with a 10 miles gap on the west in Nundgaon, and open country to any extent on the east, it is only the limited number of Bunjarahs, and the impossibility of their making more than one trip to the sea-coast in the year, that prevents indefinitely great quantities of salt forcing or rounding the Line.

128. Chutteesgurh, especially in Sumbulpore, where no grazing tax is exacted, and no wide tracts of richly cultivated and cleared country outlie our Line, seems the natural field of operations for the Bunjarahs. Daring and lawless as these men are, it is not to be wondered that, on discovering what a mere pretence for a preventive cordon our Line was, they should, many of them, have preferred the illicit to the licit form of trade. Theoretically, it might be expected that the Bunjarahs would not, in such a venture, risk their bullocks, their only capital; but, practically, they continually do this, and only recently a seizure of 70 odd loaded bullocks (which, with their loads, were confiscated by the Revenue Commissioner) was made in the Sankra beat by the Assistant Patrol. In February 1867, something was done towards protecting licit and impeding illicit trade by substituting between Sankra and the eastern terminus 3 mile for 6 and 7 mile-posts. A recent careful personal examination of the Line by the Deputy Commissioner shows that even here, the Line is still too weak, and that both here, and in a greater degree west of Sankra, smuggling

prevails to a very great extent. Sohella and Sankra, the beats that chiefly benefit by the 3 mile-posts, show a considerable increase, while Sumbulpore, Dhumturee and Arung exhibit a decrease. Of these Sumbulpore, notwithstanding its 3 mile-posts, has by far the greatest deficit, but this is due not so much to illicit trade across it (which strengthening the Line has partly prevented) as to its terminus at Sama Singha having been constantly turned.

Vital necessity for strengthening the Line.

129. Special defects in this portion of the Imperial Line have been reported separately to the Chief Commissioner, and a proposition for moving the terminus to Joojoomera, a better position, whereby 8 or 9 posts can be saved (to be utilised in strengthening the Arung beat) is now before him; but even with the new terminus, with the Nundgaon gap closed, and the Arung beat strengthened, it is certain that if smuggling is here to be at all effectually kept in check, the Line *must* be strengthened by the addition of 57 more posts, costing Rs. 15,000 a year. It is not too much to say, that we are even now losing much more than this amount of revenue, and that nearly double as much salt is now smuggled across this Division, as succeeds in passing the whole of the rest of the Imperial Line. It must be clearly understood, that smuggling has sprung up here to an extent utterly unexpected, and that practical results have altogether falsified our predictions (abstractedly in every way reasonable). As to the Bunjarahs being unwilling to risk their cattle for the sake of evading the duty; as a fact they do so continually and systematically, and in a wild country, with our nearest posts 3 miles apart, and along lengthened stretches 6 and 7 miles distant, and with no hedge to speak of *in esse* (or on the present footing of the establishment possible even in future) too often succeed in escaping punishment. The lawless character of the trade suits the Bunjarahs, and despite all the stories they tell of buying salt at Madras works, and the like, natives who know most of them, believe that numbers of them begin by evading duty there, and end by evading ours here. Of course, the *full* benefit of the change will not be realized until the terminus of our then effective Central Provinces' Line is united to the sea by an equally effective Bengal Line; but the immediate pecuniary results would unquestionably be very considerable, *especially* when we commence levying full duty on all salt not covered by Madras passes.

PENAL ACTION OF THE DEPT.
Persons.

130. During the past year 669 persons have been detected in breaches of the Customs' laws against 882 in the preceding year. Of these the Department released on payment of single or double duty 391 persons against 464 similarly released in 1866-67. The rest were in each year prosecuted, with what result the following table will show:—

Committed.		Acquitted.		Convicted.		Percentage of convictions on committals.	
1866-67.	1867-68.	1866-67.	1867-68.	1866-67.	1867-68.	1866-67.	1867-68.
358	278	...	13	358	265	100	95·32

Of persons convicted 10 paid fines, averaging Rs. 7 each, and 255 underwent terms of imprisonment averaging below 15 days. With reference to the lightness of the sentences imposed, it is only fair to state that confiscation of goods was also a part of many of these offenders' punishments; but at the same time I

am bound to record my conviction, founded on the experience of many years as a Judicial Officer, that a little wholesome severity, a few heavy sentences at the outset, would not only tend materially to decrease the insecurity of the Government revenue in this Division, but would prove in the long run the *most merciful* course where the people themselves are concerned. The greatest amount of revenue, with the least amount of suffering and inconvenience to the people, is what we aim at, and this is not, I believe, to be attained by numerous trifling penalties, but only by a few severe examples.

Goods.

131. Besides prosecutions in the Criminal Courts the confiscation of 1,380 maunds of salt, valued at about Rs. 4,000 (to the holders), and levy of double duty to the extent of Rs. 5,288, were enforced by the Revenue Commissioner, at the recommendation of the Departmental Officers. Of 339 such recommendations all but one appear to have been ultimately approved and confirmed by the Revenue Commissioner. I cannot conclude this portion of the Review without acknowledging with cordial thanks, the support and assistance that we have in this Division received from Colonel Balmain, without which, laboring under the peculiar disadvantages we here do, our position would have been difficult in the extreme.

HEDGE.

132. It is one of the chief disadvantages of this Division, that in it we neither have, nor are likely (while the establishment is on its present footing) to have, any effectual hedge barrier. From Arung eastward, the Line runs along a much-frequented road, which countless droves of cattle are continually traversing or crossing. Water is in many places unprocurable, dust in the hot weather overpowering, deer and rats abundant, with posts the nearest of which are 3 miles apart, it is simply impossible to protect and rear young plants, and of all our sowings not one has escaped, or will escape, so long as the Line lies along this thoroughfare. A dry hedge is an equal impossibility; a good one requires 250 tons of brushwood to a mile, with four men only to every 3 miles. Even where the Line is strongest, it is a physical impossibility for these men, each to collect and stack the 4,750 maunds of thorny material required, in addition to the 12 hours, (out of the 24) patrolling required of them. Even if the hedge were once made for them, they could not collect and place the 2,400 maunds each required yearly for its renewal. From Arung westward to the Nundgaon frontier, the Line follows comparatively unfrequented roads; there, if the posts were at a reasonable distance, a good Line hedge might be got up. Even now, prickly pear has been planted the whole way, and could it be supervised would probably soon become a good practical barrier, since many of the young plants are thriving; but here, with posts 6 and 7 miles apart, it is simply impossible to look after them, and a whole quarter of a mile at a time disappears, it is said, without any one knowing how it has happened. The change of the Line from Sohella, and the laying down of 2 mile posts, throughout the Division as already earnestly recommended, will render a live hedge in $\frac{3}{5}$ths of the Division (and with a little assistance in constructing it at first) a dry hedge in the remaining $\frac{2}{5}$ths perfectly feasible. To leave the Line in its present state is a half measure much to be deprecated.

OFFICERS.

133. The late Collector of this Division, Mr. Ives, has been recently reduced to a patrolship, for the conspicuous want of judgment displayed by him in a particular case. I regret to say that the Deputy Commissioner's local inspection led him to the

same conclusions that I had independently formed from records, *viz.*, that Mr. Ives' administration was generally defective, and his supervision of his subordinates lax. Of the subordinate officers, the only one that I can notice, as having worked, on the whole, satisfactorily, is Mr. Schneider, transferred to this Division shortly before the close of the year.

Men.

134. In accordance with the recommendations of the local officers, it was decided to admit Ooriahs to the extent of 25 per cent. amongst the peons. So far the experiment has been a success. Their knowledge of the people and the language, and their habituation to a purely rice diet enabling them to live far cheaper and hence making them care far more for the service than up-country men, more than counterbalancing their troublesome habit of straying away at all hours for a gossip to neighbouring villages, and their more or less conspicuous lack of energy. In conclusion, it is gratifying, as a proof of the general good conduct of the establishment in this Division, to be able to quote the following passage from the annual report of the Deputy Commissioner of Raipore: "There have been no complaints made against the officers and men of the Department (the Customs) to me. The Line is of course unpopular at first, but as soon as the people get accustomed to it, opposition to the law naturally decreases."

ALLAN HUME,

Commissioner of Imperial Customs.

Appendix IV.

Review of the Administration of the Berar Section of the Imperial Customs Line for the official year 1867-68.

BERAR SECTION. IMPERIAL LINE.

The Berar Section of Customs commences in the Akolah district; starting from the southern base of the range of hills, north of the Poorna, runs by Mulkapore, Chiklee (*Maikur district*), Sindkhera, Russoadh, Phalagaon, Poosud (*Woon district*), Sawurgaon and Kaeer; superior officials, of the rank of Patrol or Assistant Patrol, being stationed at these places. It terminates at the junction of the Pyngunga and Wurdah; its length being 334 miles. It will be officered, when at full strength, by 4 Patrols, 9 Assistant Patrols, 6 Sub-Assistant Patrols and manned by 1,311 subordinates; and is supervised by the Collector of Customs of the Wurdah Division.

Its course.

FINANCIAL RESULTS.

2. The gross realizations of the Section have amounted to Rs. 96,742.

GROSS REALIZATIONS compared with previous years.

3. The Line having been in existence but for six months, no material exists for comparison with foregoing periods. The details of receipts are:—

Salt.		Sugar.		Miscellaneous.	Total.
Quantity.	Rupees.	Quantity.	Rupees.	Rupees.	Rupees.
M. S. C.		M. S. C.			
63,780-35-8	95,701-5-4	1,027-34-12	1,027-14-4	13-6-0	96,742-9-8

Salt.

General causes affecting trade.

4. Proceeding now to notice the heads of revenue, it is to be remarked that the income from salt has, hitherto, had neither time nor opportunity to develope; much of the year's consumption of the Assigned Districts having, as shown in para. 39 of letter No. B 8 of the 28th December last, been forestalled, to the probable extent of a lakh and a half of maunds.

Special and local cause.

5. The continued production of Bhooshkie salt, under old contracts, contrary to the advice tendered by this office, in paras. 49 to 52 of the letter, No. B 8 of 28th December, has depressed, and must continue to keep down, import of the highly taxed salt. In Oomrawuttee alone, one hundred salt wells exist, capable, on the showing of the Commissioner of the Division, of turning out six khundies (of 600 seers per khundie) each per mensem, or an aggregate of 36,000 maunds in four working months. These 36,000 maunds, selling at from Rs. 25 to Rs. 30 per khundie, are worth to the contractor from Rs. 60,000 to Rs. 72,000 per annum; while his costs cannot exceed Rs. 18,000, after which he pays but Rs. 5,200 to the State, which, on so much salt, should receive Rs. 1,08,000. As long as this manufacture is tolerated, it is manifest that no income, commensurate with the population and wealth of the Assigned Districts, is to be looked for.

Manufacture of Bhooshkie salt.

Cost to the Contractor and sum paid to the State.

SUGAR

6. At first commencement of operations, sugars were, by a local oversight, brought under taxation, as shown in the following table :—

Year.	Refined Sugar. M. S. C.	Duty. Rs.
1867-68 ...	1,027 34 12	1,027 14 4

7. But, as reported in para. 48 of No. B 8, of 28th December, the levy of duty on Mirzapore sugar was at once discontinued, while reasons for similar exemption of Bombay produce were, in February, laid, demi-officially, before the Resident.

MISCELLANEOUS.

8. The miscellaneous receipts have amounted to Rs. 13-6 as classified below. There is nothing to explain in connection with these :—

Miscellaneous Receipts.

Year.	Fees on Master Rowannahs.	Fines.	Unclaimed Deposits.	Total.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
1867-68	9 4 0	2 2 0	2 0 0	13 6 0

CHARGES.

9. The total charges of the Berar Line have amounted to Rs. 47,233-3-10, of which details are given in the subjoined table :—

Year.	Fixed.	Contingencies.	Total.
	Rs. A. P.	Rs. A. P.	Rs. A. P.
1867-68 ...	39,472 9 8	7,760 10 2	47,233 3 10

NET REVENUE

10. Deducting charges from gross realizations, the net revenue remains at Rs. 49,509 for the half-year during which the Line has been in existence.

COURSE OF TRADE.

11. The following table exhibits the course of the Salt trade, as affecting the open posts of the Line, during the official half-year :—

Quantities of each description of salt that passed each post.

Names of Beats.	Quantity of each Salt passing the Beat.
	Kokan Salt.
	M. S. C.
Mulkapore	60,913-30-12
Chikle	536-39-9
Sindkhera	558-20-15
Russoadh	609-17-8
Phulgaon	250-36-10
Poosud	379-28-0
Sawurgaon	189-33-0
Kaer	341-29-2
Total ...	63,780-35-8

OF THE IMPERIAL CUSTOMS LINE FOR THE OFFICIAL YEAR 1867-68.

Duty-paying trade confined to Kokan salt.

12. This table shows the Kokan, or Bombay Coast salt to possess a complete monopoly of the duty-paying trade of the Section. But it is also very evident that consumption of the highly-priced salt can never attain its due development, so long as Bhooskie salt continues to tempt the poorer classes of the community by its untaxed cheapness.

Earlier opinion on course of trade confirmed.

Mulkapore the great inlet.

13. The opinion expressed at the outset of our operations in Berar, *viz.*, that import of salt would be confined to the space between Mulkapore and Russoadh, appears to have been so far well founded, that the first-named post seems destined to be the one great inlet of trade, and out of nearly 64,000 maunds, has absorbed more than 60,000. The post supposed likely to be next in importance, *viz.*, Sind Khera, has not, so far, answered the expectations formed on opinions expressed by traders residing in the important neighbouring town of Raja Dewulgaon. Whether, when the pre-stored stock of salt is exhausted all over the country north of, and adjoining, the Jaulnah and Nagpore road, and south of the same, between it and the Moghulaie frontier, the advantages of that road, which goes to the Nundgaon Railway station, will attract much trade, for local supplies, will depend on the adherence of grain and cotton to the route in question. This will form matter of close attention and future report. But at present, the fact is patent that, practically, what salt comes into Berar, enters by Mulkapore, quits the rail at various stations, such as Sheogaon (for Khamgaon and neighbourhood), Akolah (for Bassim and neighbourhood), and Budnaira, a very principal centre of traffic to the interior. Payments at posts east of Sind Khera, have hitherto been confined to despatches found lying within jurisdiction.

Salt is not imported out of Nizam's territory, south of Line.

Former traffic in produce vid Poona, with returns in salt

has ceased since opening of rail.

Moghulaie transit dues;

their incidence.

Difficulties of transit through the Moghulaie.

Relative prices of salt on either side of the frontier.

Improbability of duty-paying trade from the Moghulaie.

Salt might come up from the coast,

probably from Madras,

by Bunjarahs,

14. Salt traffic out of the Nizam's territory, south of our Line has not occurred and appears improbable. Formerly, when cotton went out of Berar to Bombay *vid* Poona, the return carriage brought back salt, at rates varying, according to the occasion, from Rs. 12 to 20 per load of 13 or 14 maunds. With the exception of some traffic along the Nagpore and Jaulnah road, by which grain and cotton, the latter probably grown in the vicinity of the road, pass, all this has ceased since the Railway has opened in Khandeish and Berar. Cotton now goes to Bombay, making its way from the interior to the nearest rail station; and it would never pay to send carts down empty, for the sake of return freight in salt. The Moghulaie transit duty also adds to the argument against import through that territory. Nominally, two Hallee Rupees (Rs. 1-12 English) on three maunds, it ranges from 9 annas and 4 pie, to 11 annas and 2 pie, English currency, per maund. This would still, in the matter of duty, leave the balance in favor of inland transit through the Nizam's territory, by from 13 to 15 annas per maund, but difficulties of carriage come, manifestly, to counteract this; inasmuch as, on nearing the southern frontier of the Assigned Districts, salt is found selling at about even rates, on either side of the boundary; a seer in the Rupee being the limit to which it may, here and there, be cheaper in the Moghulaie. There is thus no prospect whatever of a legalized trade, coming from south to north, anywhere from Russoadh eastward, to Kaeer, the terminal sub-division of this Section. What must be watched for and guarded against is, lest Madras or Bombay Coast salt, smuggled, at the outset, should find its way up to and across the Line. The former is more to be feared; the trade, if attempted at all, will be in the hands of the Bunjarahs, who know the route, along which they find ample fodder for their cattle, to the coast,

evading all duty.

well. The transit duty would be no heavy impost, (*on salt so far untaxed*), supposing it even paid; but, according to my information, its evasion would be neither impossible, nor very difficult, if it is collected only at fixed points, the officials at which have no outlying preventives to enforce passage, and which may be rounded. That such a trade will arise, in presence of our fairly manned Line, looks unlikely: but, with prices of salt rising under the pressure of tax, it must be looked for, were preventive arrangements neglected.

but is unlikely in presence of a preventive Line.

CONSUMPTION OF SALT.

Population of Assigned Districts

15. The population of the Hyderabad Assigned Districts is supposed to be two and a quarter millions; and is known to be highly and progressively prosperous, and so, unlikely to stint itself in any necessary of life. We know that three seers of salt per annum will answer rather more than the actual need of a healthy human being: but very recent enquiries have shown that a moderately prosperous community will not be careful to tie itself down to the very minimum of its needs; but will consume, or will waste, some little to boot. Four and a half seers per annum has lately been computed by a very competent inquirer, who was under no temptation to exaggerate his figures, as commonly used in Oudh. We may with confidence impute at least an equal consumption to Berar, which would thus require 2,50,312 maunds per annum, equivalent, at Rs. 1-8 per maund, to Rs. 3,75,468, or say four lakhs of revenue.

Wealthy.

Its probable consumption per head.

Aggregate consumption.

Revenue derivable.

SMUGGLING as yet undeveloped.

16. Smuggling has not yet developed on this Line, but, as this Review was being written, seventy odd maunds of salt, coming from Jaulnah, have been found within jurisdiction, under conditions which may argue oversight of the owners (the view taken by the Criminal Court which tried the case) or may indicate a tendency to try contraband ventures. Against this probability, our Officers have been put upon their guard.

Smuggling improbable east of Phulagaon,

but likely thence westward.

17. Under the conditions exposed in para. 14, it does not appear as though much smuggling would prevail from the junction of the Wurdah and Pyngunga, to Phulagaon, westward: but from Phulagaon to Sind Khera, and thence up to Mulkapore (still westward) smuggling is to be feared. Salt can be delivered at Nundgaon, 80 miles from our Line, for about Rs. 2-1 per maund, all told (*giving the owner credit for not having evaded the Bombay duty*), or to Nârgaon (still outside our cordon) on which it might advance under cover of the foreign territory for about Rs. 2-5 per maund. The average price of salt in Berar may be taken to be Rs. 7-12 per maund, and the profit to be gained is thus considerable. We are, however, now in a position so to strengthen, at need, this western limb of the Berar Customs Line, as to render smuggling very hazardous. I may note that the high price of salt, quoted in this para., *viz.*, Rs. 7-12 per maund, is in no wise the consequence of our duty. Salt can be landed at the most distant Railway station in Berar for Rs. 4-0-3 per maund, after paying the full duty of Rs. 3 per maund; and the rates quoted can only be attributed to combination among the traders; and, if found burdensome to the community, must ultimately decline. Salt can be bought at Budnaira for about Rs. 5-3 per maund, and landholders and others, who possess carts and cattle, can easily turn these, (when not wanted for agriculture,) to use in bringing down salt from the cheaper markets. Patels and others have declared this to me, as their intention, if salt remained dear locally.

Cost of salt outside the Line.

Average price within.

Our ability to stop smuggling.

Dearness of salt not caused by the duty.

Its cost on the rail.

Price at Budnaira

Where landholders, &c., can, by their own carriage, supply themselves.

OF THE IMPERIAL CUSTOMS LINE FOR THE OFFICIAL YEAR 1867-68.

PENAL ACTION OF THE DEPT.

Persons.

18. Thirteen smugglers only have been seized; of whom nine were released by the Department, and four committed for trial. Results of these prosecutions have not, as yet, reached this office.

Goods.

19. In two cases, 1 maund, 2 seers, and 15 chittacks of salt were recommended for confiscation; and in six cases, imposition of double duty was solicited, on 11 maunds, 22 seers, and 15 chittacks of salt. The awards of the Commissioner of revenue are not yet known.

HEDGE.

20. As reported in para. 24 of letter No. B8 of 28th December, no attempt at planting a green, or constructing a dry hedge will be feasible until the Line has been demarcated and straightened, and ground formally assigned to the Department.

OFFICERS.

21. During the period under review, the office of Collector of this Division has been held by Mr. T. A. Martin. Under conditions of some difficulty, and despite severe personal illness, this officer did good service in organizing the infant Line. The younger officers are, without exception, too new to their respective duties, or to their localities, for any one so to have distinguished himself, as to bind me to putting him forward. But in my next year's Review, I shall hope to have the pleasure of bringing them to the favorable notice of the Resident.

MEN.

Difficulty in procuring.

Aid afforded by the Central Provinces.

22. Very great difficulty has been experienced in obtaining proper recruits for this Division, and but for the liberality of the Officiating Chief Commissioner of the Central Provinces, in placing at our disposal a draft of over 400 old hands of the Wurdah Line, it is certain that this office would have found it impossible to carry into effect the wishes of the Resident that the Line should practically be at work by the 15th of October. But with its hands thus strengthened, time was kept, and consolidation of the force has since steadily gone on.

PUBLIC BUILDINGS.

OFFICERS' HOUSES.

23. None have, as yet, been erected; nor, is it yet possible for me to say how many, or in what places, houses will have to be built. The Patrol of Mulkapore and the Assistant Patrol of Sind Khera have found very habitable accommodation at their respective posts; the rest of our officers endure, I regret to say, very great temporary discomfort.

Men's huts.

24. These have been temporarily raised, by the aid of the local authorities, out of the grant of Rs. 5 per closed post, allowed by Sir Richard Temple; and although the accommodation is of the roughest, it will probably enable us to tide over the period which must intervene until we are prepared with regular estimates for permanent buildings.

MATTERS OF GENERAL INTEREST.

Attempt to forestall installation of Line by introduction of large quantities of Salt

stored at Budnaira and Oomrawuttee.

Under authority of the Resident, these were impounded;

and duty ultimately secured.

25. Among points of general interest, remaining to notice is the abortive attempt of certain traders of Budnaira, Oomrawuttee and Nagpore, to make profit out of their foreknowledge of the intention of Government to enclose the Hyderabad Assigned Districts by a Customs Line. With this in view, between July and the latter days of September, the capabilities of the Great Indian Peninsula Railway, and their own available capital were made use of to the utmost, and 43,182 maunds stored, at Budnaira and Oomrawuttee alone. Their movements were not unknown to this office; but no sign was made, in fear of the consignments being so re-distributed as to render action hopeless, until the authority of the Resident was obtained to declare the above-named towns within Customs jurisdiction. The salt was then impounded, and duty, after a brief attempt at resistance, was secured.

REVIEW OF THE ADMINISTRATION OF THE BERAR SECTION.

Attention invited to points already put forward, viz.,—

26. In conclusion, I may fittingly call attention to the following points of importance, put forward in letter No. B8 of 28th December 1867, *viz.* :—

Completion of Gordon up to Chanda,

Provision for filling the gap between the Berar terminus, at the junction of the Pyngunga and Wurdah, and the Imperial Line at Chanda, para. 17.

allotment of land for a road,

Demarcation and allotment of land for a road, para. 24.

provision of fire-arms.

Provision of fire-arms for dangerous posts, para. 25.

stoppage of Bhooskie salt manufacture,

Suppression of manufacture of Bhooskie salt, paras. 49 to 52.

and modifications of salt laws.

And the propositions for modifying the salt laws to meet local requirements, embodied in letter of this office, No. J13 of the 22nd of February last.

F. W. VERE,

Depy. Commr. of Imperial Customs.

Appendix V.

Review of the Administration of the North-Western Provinces' Section of the Internal Department of the Imperial Customs for the official year 1867-68.

INTERNAL DEPT. N. W. P.

The internal branch of the Imperial Department of Customs is organized for the prevention of the illicit manufacture of salt, and for the regulation of saltpetre and kindred manufactures. Its functions extend over 27 districts, comprising an area of 61,895 square miles, and containing a population of 26,978,817 souls. For Departmental purposes this space is divided into twelve circles, each under the supervision of a Deputy Inspector, who ranks with Patrols. Six of these circles are under the care of an Inspector, who ranks with Collectors. The Executive Establishment consists of 864 officers and men: the whole being under the orders of the Deputy Commissioner of Customs.

its object

and internal economy.

FINANCIAL RESULTS.

GROSS REALIZATIONS. Increase

2. The receipts of 1867-68 amount, from all sources, to Rs. 87,033-13-6 against Rs. 79,470-8-4 in 1866-67, or an increase of Rs. 7,563-5-2.

3. Comparing, last year, the results of eleven months with those of the preceding twelve, an average was added to show what the year's yield *might* have been. Doing the same this year (which would bring the receipts of 1866-67 up to Rs. 86,694) the year just ended would still be in excess by Rs. 339; thus the two periods have, as to general results, kept fairly abreast of each other.

compared with results of last year.

4. The following is a synopsis of the receipts of the year :—

	1866-67.			1867-68.		
	Rs.	A.	P.	Rs.	A.	P.
Fees on licenses ...	32,068	4	0	50,843	0	0
Fines and confiscations ...	370	3	8	261	5	11
Duty on salt ...	47,032	0	8	35,929	7	7
TOTAL ...	79,470	8	4	87,033	13	6

5. The item of fees thus yields the considerable increase of Rs. 18,774-12, while fines and confiscations, and duty on salt, are, respectively, Rs. 108-13-9 and Rs. 11,211-5-4 behind those of 1866-67.

Fees. *Increase.*
Fines and duty on salt. *Decrease.*

6. Annexure A embodies the usual resumé of collections under the three headings—Fees, Fines, and Duty on Salt, and shows the relative income for month against month of the preceding official year.

Collections *analyzed, month by month.*

7. Annexure B gives the collections in each circle; all, with exception of four (Mynpoorie, Furruckabad, Ghazeepore and Goruckpore) showing increases, as compared with the returns of 1866-67. The highest realization of the year has been in the Futtehpore circle, and the largest figure of increase in that of Allygurh. Annexure C shows the salt destroyed as too impure to be fit for sale, equivalent to Rs. 1,460 of duty.

Collections of Circles.

Detail of salt destroyed.

8. Why the income of the Internal branch has declined, why it will, in all likelihood, continue to diminish, has often been

Explanation of decline of receipts no longer needed.

described by us and accepted by Government. On that head no more remains to say.

CHARGES.

Net outlay.

What this outlay goes to assess.

9. The expenditure of the year has been Rs. 1,56,480-15-1, so that, after receiving Rs. 87,033-13-6, the State has expended Rs. 69,447 or Rs. 5,787, per mensem, in protecting an income of say 95 lakhs; for the salt revenue of the entire Line, from Hansie down to Saugor, would, within the first year, feel and show the recoil, were the functions of the Internal Establishment suddenly to come to an end.

CHARGES ANALYZED.

10. The expenditure of the year, already stated in para. 9, amounts to Rs. 1,56,480-15-1, against Rs. 1,42,308-1-9 in 1866-67; *vide* following synopsis:—

	1866-67.			1867-68.		
	Rs.	A.	P.	Rs.	A.	P.
Pay	1,36,040	2	7	1,48,260	0	0
Contingencies	5,996	4	1	7,774	2	5
Refunds	69	11	10	408	12	8
Profit and Loss	201	15	3	38	0	0
TOTAL ...	1,42,308	1	9	1,56,480	15	1

Formerly a larger sum was spent without attaining its aim.

11. And for many years, the State contentedly spent even a larger sum, *viz.*, Rs. 7,247 per mensem, on a force which, on the testimony of its own officers, did nothing and prevented nothing.

Causes of increase in outlay.

Salaries.

12. The increase under the head of Pay is attributable to twelve months being in account against eleven. The average of the eleven months was Rs. 12,367: that of the twelve was Rs. 12,355: and to add the one, or deduct the other, would bring the outlay of the two periods as nearly into equality as is possible, where a considerable body of men, with salaries liable to fluctuations, from absence, dismissals and deductions is in question.

Contingent expenditure.

13. The increase in contingencies arises, firstly out of the increased expenditure for service postage labels, of which the value, in 1867-68, in twelve months, was Rs. 2,690-8, against Rs. 1,694-4-6, in seven months, of 1866-67; and, partly, out of the necessary difference between twelve months and eleven; partly, out of the impossibility of moulding such expenditure into fixed and invariable dimensions.

ISSUE OF LICENSES

analyzed by Circles.

Increase of crude licenses is all but general;

but refining licenses have decreased.

The increase on crude licenses is fairly divided, except in the Jounpore Circle.

Kharee works have swelled the increase

from development of works;

also from greater care in preventing clubbing.

14. Annexure D shows the issue of licenses, for crude and refining works, and their increase or decrease by circles, as compared with the issues of the previous year. Unlike its predecessor, the latter year shows an increase, in crude licenses, for all circles but three (Muttra, Furruckabad and Goruckpore), but, like it, betrays a decrease, all but general, in refining licenses, two circles only, (Banda and Jounpore) having slight increases. Except in Jounpore, in which circle, (including the district of Benares) a large number of licenses for a peculiar process has been granted, the issue is spread, with fair evenness, over the provinces. All other considerable increases have been in circles which contain kharee works; and are due, partly, to much actual development of works, the produce of which is in demand, and fetches a high price; but also to more stringent control and better appreciation of the individual standing, as holders of separate interests, of parties concerned in factories, so closely clustered as to present the appearance of one concern.

Further detail will be given, on this subject, in another portion of the report. The figures below show the number of kharee works, open in the two last years:—

Kharee Works.

1866-67. 5	1867-68. 1298, *viz.*—	1866-67. 5	1867-68. 1,298, *viz.*—
Agra	... 10	Allahabad	... 103
Allyghur	... 413	Jounpore	... 43
Boolundshuhur ...	... 59	Ghazeepore ...	... 24
Budaon	... 72		
Mynpoorie	... 29		1,298
Furruckabad ...	... 23		
Futtehpore	... 522		

Detail of licenses refused.

15. Annexure E shows the licenses of both letters refused in each circle during the year; 135 applications for crude licenses have been refused against 84 in 1866-67; and the greater proportion of these refusals has occurred in five districts, (Mynpoorie (14), Furruckabad (36), Futtehpore (20), Allahabad (21), Jounpore (24).) Two refining licenses have been refused, against one, refused in 1866-67. The increase in refusals will be taken to show that our officers have not neglected to look into the merits of applications; and have known how to avoid the temptation of adding to their collections, by unduly running up the receipts on fees. The statistics of the present season of issue will, if recent orders produce the effect they should, (and there is every reason to believe that our officers are thoroughly alive to the obligations imposed on them by the present unsettled condition of the Line revenue), show a considerable increase of refusals to license.

Districts where refusals have mainly occurred.

Refusals of licenses to refine:

these show that applications have been scrutinized.

Further increase of refusals is probable.

Cases of working without license.

16. Annexure F, exhibiting the number of cases in which factories have been discovered working without licenses, shows a decrease, as compared with 1866-67, and goes back nearly to the figures of 1865-66. But, in the year before last, many examples were made, and the lesson may be presumed not to have been lost on the classes concerned.

Decrease as compared with 1866-67.

Cause.

PENAL ACTION OF THE DEPARTMENT.

SEIZURES.

17. In annexure G is presented an abstract of the seizures of the year. While cases are notably fewer in number (623 against 918 of 1866-67) there is an equally notable increase in the quantity of salt seized; 1867-68 having 514 maunds against 253 in the foregoing year. This is due to discovery of a considerable salt manufacture, in connection with kharee works, in the circle of Mynpoorie, where seizures, to the amount of 377 maunds, were effected, and an example, which will be alluded to further on, made of a body of our men, found to have been in collusion. But for this, as was foreseen when the rules, promulgated on the 9th of October, were devised, there would have appeared a very considerable decrease in the tale of seizures; and the effect of those rules is clearly to be traced in the greatly lessened number of persons committed for trial.

Abstract of seizures.

Cases decrease,

Quantity of salt seized has increased

caused by large seizures in one circle.

Our men having colluded, an example was made;

but for this, the effect of the new rules would have caused a decrease.

PROSECUTIONS.

18. Results of criminal trials are not as good as in 1866-67, as the following synopsis shows;—

Synopsis of penal proceedings.

	1866-67.	1867-68.
Men committed for trial ...	2,330	1,204
„ punished	1,747	789
„ released	583	390
„ pending trial ...	0	25

Percentage of convictions on committals,

19. Thus, while in 1866-67 punishments were 74·97 per cent. on committals, the percentage is 66·91 in 1867-68. Releases, which in 1866-67, were 24 per cent. on committals, rise to 32 per cent. in 1867-68. I cannot profess to be satisfied with the above; the proportion of acquittals being manifestly too large; and

which, for this year, is not satisfactory,

renewed injunctions will issue to all subordinate officers, enjoining attention to standing orders, in connection with preparation of seizure cases.

Detail of paid up fines.

20. Annexure H is a detail of sums received by the Department during the year, as fines, levied by Magistrates and paid up by defendants. The total is Rs. 6,350. The total of fines, *inflicted during the year*, is Rs. 10,272, of which, up to date, Rs. 3,866 are known to have been paid. It is to be noted that the sum of Rs. 6,350 includes cases pending at the close of 1866-67.

ESTABLISHMENT.
Punishments.

Percentage higher than in 1866-67,

showing that discipline has been kept up.

21. The percentage of punishment in the Departmental force continues large, as shown by details in Annexure I. It was 13½ per cent. in 1866-67; it has risen to 21 per cent. in 1867-68. The results to our own people, of the cases alluded to in para. 17, have helped materially to raise the figures. But the returns, lamentable, as in some respects they must be held to be, show, at least, that the officers of the Department have not been unwatchful. *In no year of its history, I believe, has greater vigilance been exercised: at no time has there been a more unflinching determination to spare no one who could be proved neglectful of, or false to, his trust.* The Departmental year has been one of anxiety; and, viewed in certain lights, its Line income shows as having declined. It is true that, looked at from another point of view, the income has gone up, rather than down. But that, under *any* aspect our realizations on the Line should exhibit a decrease, was enough to disquiet all superior functionaries of the Customs. Of that disquietude, this office has borne its full share; and the pressure of supervision on its officers has been heavier than ever. That this has reacted; that officers, in their turn, have been keener than ever on the track of the lazy, the incompetent, the dishonest, among their subordinates, is apparent in the statistics of the year's administrative penalties.

The conditions of the year have caused much anxiety in the Department,

supervision has, consequently, been more than usually stringent;

and its results appear in the penalties detailed.

MISCELLANEOUS.
Decline in quantities of salt cleared from bond.

22. Salt cleared from bond, in saltpetre refineries, has amounted, in 1867-68, to maunds 12,008-12-14, against maunds 15,007-7-14 in 1866-67, the steady, if now gradual, declension of saltpetre trade being a sufficient explanation of the difference.

Refineries working under contract.

Absence of eagerness to enter into these

23. Nine refineries only have worked under contract, against 29 in the preceding year; and I may justifiably revert to the conclusion which, in para. 28 of the last Annual Report, was drawn from the absence of all eagerness, on the part of saltpetre refiners, to enter into these bargains. It is true that we have never permitted these contracts to be made in the highly saliferous portions of our charge. To do so would be to *invite* fraud: but had they, where sanctioned, been found a source of great profit, in the only manner available, *viz.*, by allowing the manufacture and sale of very much more salt than was paid for, it is very clear that applications would have abounded; that many of the smaller concerns would, in fact, have worked on for the sake of the profits obtained by thus hoodwinking us. But, in the very circle where these contracts were principally given, there is, as shown in Appendix B, a marked closing of the small refineries with which they were formerly made.

proves that they have not been turned into sources of profit,

there being a decrease in Refineries, where these grants were mostly given.

CONDITION OF SALTPETRE TRADE.
Detail of exports.

24. Trade in saltpetre remains much where it was when the last Annual Report was written; not dead, not actually extinct, but palpably declining, as Annexure J, furnishing details of export from Calcutta, for the last three years, may serve to show.

25. The whole year through, prices in Calcutta have varied little: the limit, on either side, for good saltpetre, having been Rs. 5-10, at highest, and Rs. 5-1, at lowest. But, up-country, good stuff cannot be *made* for less than Rs. 4 per maund; and, making every allowance for difference between local and Calcutta weight, which, where the former, as at Furruckabad, is large, will often cover all expenses of transit, such a margin as the above is but narrow to afford room for all the middle profits which are expected between leaving the hands of the maker and entering those of the shipper.

Prices in Calcutta have varied little,

but prime cost is not less than Rs. 4,

which leaves little margin for profit.

26. Saltpetre is now used, largely, for but one purpose, *viz.*, gunpowder-making; and the manufacture of gunpowder itself is on the wane. It still holds its own for purposes of war: as a projectile explosive its adaptability and manageability have not yet been equalled: it is even said, by very high scientific authority, to be doubtful if any compound will ever be made to equal it in these prime qualities of an agent of combat: but, for other uses into which, but lately, it so largely entered, as a mining or engineering auxiliary, it has met formidable competitors, the principal among which is, now, nitro-glycerine. So, with the one compound, into which its staple greatly enters, in lessened, if still assured request, the factories in Europe turning out a better saltpetre at prices with which it can very barely compete, it is evident that the Indian trade is sorely beset; and that if no change, at present unforeseen, such as the highly improbable exhaustion of chloride of potassium in the German salt mines, should come to its aid, its complete annihilation is only a question of time.

Saltpetre is used mainly for gunpowder,

which is still in favor for uses of war;

but has formidable rivals, principally nitro-glycerine, for industrial uses.

Demand for the only compound in which saltpetre occurs, largely declining,

the cessation of trade appears only a question of time.

27. In former reports, I have written much of the baneful effect of the works in which the sulphate of soda (*kharee non*) is produced; and might re-write all without overstating the facts. In para. 27 of the last Annual Report, was noted the withdrawal, even at risk of allowing some small illicit manufacture to go on in other places, of special parties for the supervision of the great kharee clusters; on the principle that, left to themselves, their owners would turn out salt wholesale. A few works, despite all warning, were, in Mynpoorie and Etawah, allowed to turn their capabilities to account. Supineness and inaptitude of the officer in charge encouraged his subordinates to try for their share of the gain; and collusion resulted. This did not endure long; it could not have begun before April, and in May and June we made heavy seizures, securing nearly 400 maunds of salt; and bringing down, on the owners, fines to the amount of nearly Rs. 3,000. Our own men were visited as heavily as was possible in absence of such evidence as would have allowed us to arraign them before a Criminal Court. The officer whose laxity, from first to last, was conspicuous; who had not even the energy to carry out instructions, then elaborated and placed in his hands, was removed; and the circle, after a thorough weeding, placed in more energetic keeping. But this is a specimen of what kharee workers can do for us if they try. In anticipation of the present season, I have placed in the hands of those officers whose circles contain many of these works, such instructions as will make it specially and distinctly their individual fault if every effort is not, for the next two months, made to keep this danger down. Special guards have been organized; makers and landholders have been and are being warned, whenever we issue a license that we will, henceforward, visit all who break the law with its bitterest rigor; that we will break up all works where salt is made; and

EVIL EFFECTS OF KHAREE WORKS.

In 1866-67, special parties were organized to watch these works,

nevertheless, some did mischief;

but it was soon detected, and seizures were made,

entailing heavy fines on the owners;

and our own men were severely punished,

and the officer in charge was transferred.

Most stringent instructions for supervision of kharee works have issued in this year;

makers and landholders have been warned of the penalties of breaking the law.

the profits to be made by an informer have been carefully published;

but it is still probable that some of these works will turn out salt,

although on a comparatively limited scale.

that it will be in vain to ask us again to license those villages where they have existed. The profits which an informer can make are being published far and wide; and, in short, what lies in us to do, we are doing. And yet, I do not venture to say that some of these kharee works will not turn out salt; for, as before explained, they are extensive, their owners numerous and well banded together, their opportunities great, and our men, after all, but few. We may thus still look to being outwitted; although not on the monster scale which would obtain were the works not carefully watched.

Special rules are demanded.

Suppression is objectionable.

28. There is but one way out of the dilemma, *viz.*, through special arrangements. The shorter and sharper process of entire suppression is open to special objections; and, therefore, the middle path of a special code is that to which we should look for future safety. I do not adhere to my own theories, but am quite ready to take up and cordially work out any others, preferred by superior authority. What, just now, looks most feasible,

Prescription of a percentage, and confiscation, if this is exceeded, appears recommendable.

is to prescribe a certain percentage of alimentary salt, excess of which shall subject the produce to confiscation. On this, a special report will follow.

Beneficial effect of Internal operations, felt on the Line.

29. That the reaction of the operations of the Internal Department has been beneficially felt on the Line; that, without the assistance of the former, the income of the latter could not, against the many difficulties of the year, have maintained its still healthy condition, will, I hope, be admitted. I will now briefly notice matters of interest in the reports from subordinate officers.

REVIEW OF SUBORDINATE REPORTS.

INSPECTORSHIP.

Adulteration of salt with kharee

is beyond our power to deal with;

aid of the public is needed;

30. The adulteration of salt with kharee, alluded to by Mr. Ray, the Inspector, is one of those things which we are powerless to prevent, so long as kharee continues to be made under the present system. The act appears distinctly punishable under Section 272 of the Penal Code; but it is for the public, rather than for us, to see to its suppression. That we have a strong interest in the matter is evident; but suppression would involve systematic visitation of retailers' shops, examination of their stocks, a chemical test whenever suspicion arose; and for this we have neither the authority, nor the force, nor the leisure. Unless then, the public will help us, we seem to have little chance against the adulterator, whatever power special legislation and added force may give us over the maker of the kharee. Three or four years ago, this office took up this very question, but had no such success in obtaining ground for prosecutions as warranted perseverance.

an unsuccessful attempt was formerly made to detect and punish the practice.

Carbonate of soda, or "sujjee." The demand for it;

its manufacture is not dangerous to us.

31. Mr. Ray reports a rising demand for one of the substances legislated for in Section 11 of Act XXXI of 1861, the carbonate of soda, or "sujjee." As long as they confine themselves to their legitimate business, these works are a source of no danger; but it is necessary to keep them under license, to ensure their remaining within due bounds. We have profited this year, by the demand for this substance in Jounpore and Ghazeepore. The cause of its being in such request is not very clear, and further inquiries will be made.

Cause of the briskness of this trade is not very clear.

Abolition of retail sales of salt in refineries, advocated by Mr. Ray

32. Mr. Ray supports in his 7th para. a proposal revived by the Deputy Inspector of Futtehpore, to abolish retail sales of salt, at refineries, under Mooshriff's passes. The idea is that when an officer, qualified to receive duty, visits a refinery, he

should cause all salt on which duty has been paid, to be at once removed from the maker's premises, and conveyed under a pass to any place which the owners may select, out of Customs' jurisdiction (a circle of 100 yards round the factory); the protecting pass being recovered by a peon, who should escort the salt to its destination. The objection to this is that every refiner does not possess premises, 100 yards from his factory; that where such storage room is not available, the order would force him to sell, not at his own time, but at ours; and would place him, as to price, much at the mercy of the purchaser. It does not appear that the innovation would prevent malpractices between the visits of our officers; while it seems dangerous to add (by depriving the refiner of the power to make, at his own leisure, the best bargain he can) to the inducements to betake himself to illicit practices.

Objections of this Office.

33. In paras. 8 to 11 of his report, Mr. Ray pleads strongly for extension to officers of this Department of the grant of public tents, as allowed wherever constant marching forms an important part of duty. Concurring with him, I propose to submit a separate report on the subject.

Application for public tents.

Separate report will be made.

34. Mr. Ray notices, in very favorable terms, the services of Messrs. Bartlett, Ashton, and Hardingham.

Officers noticed by the Inspector.

35. The report of this circle contains little calling for reproduction. Emigrations to Sylhet, Mauritius, &c., are described as providing for classes who have abandoned saltpetre making.

GORUCKPORE REPORT.

needs little notice.

36. The Deputy Inspector, Mr. Cleveland, draws attention to the untowardness of weather, which has greatly checked every kind of saline manufacture. Keeping the works idle, it has reacted to prevent illicit production of salt; and, as a necessary consequence, seizures have been rare.

GHAZEEPORE REPORT; untowardness of weather brought to notice.

37. He seems to think that badness of the preceding season had lessened stocks of "sujjee," and thus led to the existing demand. If this be true, we must not expect to profit as largely, in the present year, by issue of licenses for this commodity.

Deputy Inspector's opinion *in re* "sujjee."

38. The kharee difficulty is treated of in paras. 8 to 13 of his report. What is said of the use of this substance as human food, must be taken to mean that much impure salt has been sold under its name. The very remedies prescribed by Mr. Cleveland, (additional precautions to secure non-separation of the salt) go to prove this. To ensure the imbedding of the salt in the flaky masses of kharee would, according to Mr. Cleveland, "result in a very considerable disuse of kharee as an apology for salt"; in other words, kharee, *per se*, is unfit for food. I have endeavored, in para. 28, to indicate the proper remedy.

His opinion on the kharee question,

on adulteration of salt with kharee;

complete admixture indicated as the remedy.

39. Mr. Cleveland describes many of the former saltpetre refiners of his circle, as having taken to sugar-making: while one or two have migrated to Bengal, where salt or saltpetre can be made at will.

Adoption of sugar trade by saltpetre refiners in Ghazeepore.

40. Paras. 16 to 19 of the report are given up to consideration of import of western and eastern salts. Statistics are given of supplies to the marts of Ghazeepore, Bulleah, Sindhpore and

Imports of Western and Eastern salts considered.

Mr. Cleveland relies little on the statistics attained.

Influx of river borne salt, quantities and freights omitted.

Eastern and Western salts sell at equal rates at Bulleah.

Trade in sugar with up-country having brought down returns of salt.

Russerah, amounting to 5,900 maunds of eastern, and 31,377 maunds of western salt. But the writer himself considers these unreliable. Eight hundred maunds of western salt have likewise been traced to Azimgurh; but this can be but a mere item in its supplies. An annual influx of Eastern salts, Suffree, Kurkutch, and Pungah, river-borne, is noted; but no estimate of quantity, or rates of freight, are given. One-third of the Ghazeepore district, and about one-fourth of Azimgurh, are said to consume these Eastern salts. At Bulleah, the eastern-most mart of the district of Ghazeepore, Eastern salt (Suffree) is said to sell at seven seers eight chittacks, to seven seers ten chittacks per Rupee. Western salts now sell at the same rates. Rise of trade, with up-country marts, in sugar, alluded to also in some of the Line reports, has attracted return investments in these latter salts.

Map showing areas of consumption of the two salts,

shows but a narrow strip as supplied by Eastern salts;

but this conclusion is contradicted by result of other inquiries.

41. The neatly executed sketch map, attached to Mr. Cleveland's report, professes to show the areas of consumption of the Western and Eastern salts; and the centres from which supplies of each are distributed. According to it, only a narrow strip, on the extreme east of the districts of Azimgurh and Ghazeepore consumes Eastern salt. But other inquiries, as known to the Commissioner, give cause to infer that Mr. Cleveland has not rightly appreciated the dimensions of the area within which the latter salt is principally used.

Emigration of saline workers;

their recurrence to agriculture, &c.

Adaptability of these classes

who have never devoted the whole year to saline processes,

Unskilled labor being sought for.

The decline of saltpetre trade has caused no distress.

42. Mr. Cleveland likewise shows how emigration to Sylhet, Cachar, and Mauritius has drawn off an ascertained number (538) of those who formerly worked at crude saltpetre; and how ordinary agricultural and laboring avocations have furnished employment for others. This latter may be said to be the case everywhere. The classes who work at these saliferous trades are an adaptable race, and have more than one craft in their fingers. Agriculture and spade labor are of old familiar to them: their occupation as makers of various saline substances, has never filled up the year; and they have always been apt at falling back on other means of gaining their bread. Unskilled labor being in demand, the diminishing profits of their peculiar manufacture has the better inclined them to meet it. It may confidently be said (the remark applying to the whole of the North-West and to Oudh), that decline of saltpetre trade has put the providers of crude produce to no serious or prolonged straits.

JOUNPORE REPORT.

Increased demand for kharee licenses.

Precautions in connection.

The works are concentrated.

Many licenses refused.

43. Mr. Hardingham, Deputy Inspector of the Jounpore Circle, notes increase of kharee licenses. With all the warnings in his hands, he will hardly fail to watch the works carefully. On their side, the owners must know that this will be their last chance of making *anything*, if they are discovered making salt. The works are grouped in one pergunnah, and so, to some extent, capable of being supervised. Many applications for licenses have been refused.

Belief that salt-making has declined.

concurred in.

The law having been well enforced;

but entire extirpation is almost hopeless.

44. After exposure of the many difficulties which beset his task in connection with crude works, Mr. Hardingham expresses a conviction that salt-making has received a decided check. This is probably well founded. The law has been vigorously enforced in this district; and there are new modes of earning a livelihood, as profitable as salt-making, even in Jounpore. But the migratory habits of certain castes; the male members working abroad, while the women remain at home, in the neighbourhood of very saline tracts, give rise to peculiar difficulties. We shall never quite blot out small salt-making here: but may hope to keep it *small*.

Estimates of imports of salt into Jounpore

45. Mr. Hardingham has obtained estimates of 33,687 maunds of salt, imported for the use of the city and district of Jounpore; but himself puts the supply at double that figure. That even is too low; for the population of the district being 1,015,737, should, at three seers per head, require 71,680 maunds. Mr. Hardingham has seen the road from Allahabad almost monopolized by traffic in salt, or by return ventures in grain; and making all allowance for despatches which must have gone past into the district of Azimgurh, the high road into which passes through Jounpore, it is evident that his informants have ludicrously understated their transactions.

manifestly understated.

Estimates of imports into Benares,

are better founded.

46. Imports of 68,000 maunds are admitted by Benares merchants. This sounds like truth. The population is 793,277, and the district, with the Ganges running through it, has other sources of supply; although Mr. Hardingham is vexatiously silent as to the probable quantities of the imports which he mentions of Eastern salts in November and December.

To secure reliable statistics, trade-writers are essential:

47. To obtain reliable statistics, we should station regular trade-writers on the main channels of salt trade; and some of our disused Mooshriffs might thus be turned to excellent account. These enquiries, in intervals of work, by officials who have to traverse great distances in search of their subject, are unsatisfactory. The knowledge is desirable, but is not to be attained, even approximately, without some special agency. But if Government would allow a portion of our budget grant for Mooshriffs, to be turned to this use, really trustworthy data might, in the space of one working season, be obtained; say six trade-writers per district, under the direction of our officers, which, paying the men at Rs. 10 per mensem, would cost about Rs. 13,000. All the great lines could then be watched, as has been done at the bridge at Cawnpore, the traffic over which has been accurately registered. No other way of arriving at statistics worth having, is apparent; our preventive officers have already ample work.

whence these may be had:

number required:

their probable cost.

Briskness of Sujjee trade in Jounpore:

its harmlessness.

48. Like his neighbour of Ghazeepore, Mr. Hardingham has had many applications for Sujjee licenses, and sees nothing to dread in connection with them. The process which he describes is safe, if adhered to.

ALLAHABAD REPORT.

Salt market overstocked in 1866-67;

49. Mr. Ashton, Deputy Inspector of the Allahabad Circle, bears witness (para. 10) to the glutting of the markets with Western salt, at the conclusion of the official year 1866-67; and asserts what I believe to be literally true, that supplies, then in store, very far exceeded immediate demand. Under any circumstances, this would have tended to induce a lull, more than ever, where rumours were creating a ferment, as was the case in this neighbourhood.

tendency, combined with current rumours, to lull trade.

Lower markets are asserted, in Mirzapore, to be supplied with Eastern salt.

50. According to Mr. Ashton, traders in Mirzapore say that markets below that station have been supplied with eastern salts; a theory which, although combated by the Inspector, in virtue of personal inquiries, made lower down, seems to possess a certain solidity.

Manufacture of salt in Rewah.

Locality of works.

Produce used in Bara and Khyragurh.

Probable yearly loss to Government.

51. In para. 15, Mr. Ashton remarks on a source of loss for which we now possess no remedy. Just outside the boundary of our Pergunnah Khyragurh of Allahabad, are considerable salt works, turning out excellent salt. Much of this certainly finds its way into Bara and Khyragurh of Allahabad; and to say that we thus lose half a lakh of rupees yearly, is not to overstate the

APPENDIX V
INTERNAL DEPT
N W P.

[illegible]

fact. We have no accurate knowledge of the productive power of these works; but three quarters of a lakh of maunds annually may be held as within their capabilities.

[illegible] Western salt.

52. Nothing but Western salts are consumed in the Allahabad district; beyond the influence of this Rewah salt.

Maps showing locality of kharee works

which are being properly supervised.

Retarded work explains absence of seizures.

53. Mr. Ashton has prepared two sketch maps showing the neighbourhoods in which kharee works exist in his circle. His 17th para. shows that supervision of these works is being properly cared for; and that the pressing importance of the task is well understood by him. The retarded condition of work in these factories is justifiably put forward to account for absence of seizures during the year. Idle, they could furnish no cause for interference.

FUTTEHPORE REPORT.

Refinery salt readily sold.

54. Refinery salt, when of fair quality, finds ready sale, at from Rs. 4 to 4-8 per maund; and is retailed in admixture with Western salts.

General good faith of refiners.

Our powerful hold on them.

55. Refiners are stated to act generally in good faith, as regards disposal of their residuary salt. We have a powerful hold on this class, in our ability to destroy their works on proof of fraud.

Salt trade prosperous.

56. A general well being of the salt trade is described by Mr. Bartlett (para. 14).

Domestic manufacture of salt checked, and kharee works duly supervised.

57. Domestic manufacture of salt is held in check, and the remarks on kharee works and manufacture (paras. 19 to 31) show that Mr. Bartlett well appreciates, and has done his best to avert, the dangers to which we are exposed.

Friendly attitude of district authorities.

58. Favorable disposition of district authorities is mentioned; and it is due to Mr. Bartlett to say that, wherever he has been, he has known how to conciliate and secure the good will of those with whom his functions have placed him in contact.

BANDA REPORT.

Increase in Russee works; its cause.

The report contains little but what has already been discussed.

59. An increase in Russee works, is traced by the Deputy Inspector, Mr. Browne, to the fact that the time of the makers, during the preceding year, was taken up in laboring at public buildings in Humeerpore and Jaloun. No longer thus occupied, they have reverted to their ancient calling. The few matters of general interest, discussed by Mr. Browne, who has not produced as good a report as might have been expected, for which his recent transfer may be accepted as some excuse, have already been noticed in various parts of this Review.

FURRUCKABAD REPORT.

Influence of weather unfavorable to manufactures.

60. Mr. Bradford, Deputy Inspector of Furruckabad, enlarges on the decline of saltpetre trade, and on the untoward influence, on present prospects of manufacture, of the recently prevalent weather.

Caution exercised in issue of kharee licenses.

61. He has been commendably cautious in his issues of kharee licenses, and has refused to grant them for localities which he has felt himself unable properly to supervise.

Decline in Line collections

attributed to internal [illegible] manufacture,

but no foundation is apparent for the rumour.

62. Paras. 18 to 23 of Mr. Bradford's report treat of decline of Line collections, and of the influence recently attributed to illicit manufacture in three Customs circles, of which his own was one. But nothing having occurred to show that there was any foundation for this rumour, discussion would be superfluous.

Decrease of seizures. *Cause.*

63. Influence of weather, and the action of the new rules, which prohibit penal proceedings where less than one seer of salt is found, are assigned by Mr. Bradford to account for a decrease in seizures. Like many of my officers, he is personally opposed to the recent regulation. This was to be looked for; zealous executives are unlikely to regard with favor what curtails their action and limits their exhibition of results: but rules such as those under consideration, require patient and extended trial, which these have not had, having, as yet, been in operation only during the least active time of year.

MYNPOORIE REPORT

64. The report of Mr. Melville Smith, Deputy Inspector of this circle, contains nothing but what has already been discussed, and I need thus not reproduce any of its contents. This officer had been but two months in the circle.

needs no reproduction.

ALLYGURH REPORT.

Confidence in extinction of illicit manufacture *may not be well founded.*

65. The confidence expressed by Mr. Durant, Deputy Inspector of the Allygurh Circle, in the progressive extinction of illicit manufacture in crude works, and in its entire cessation, as direct from saline earths, is, I fear, likely to be misplaced; and that officer will not be permitted to repose in it.

Importance of local kharee works *which will be properly cared for.*

66. There are very important kharee works in this circle, and I have full confidence that the zeal and activity of Mr. Durant will ensure conscientious effect to the instructions which the exigencies of the year have dictated.

Relations with local authorities are satisfactory.

67. Satisfactory relations with district authorities are noted; and, here also, are much attributable to the personal qualities of the officer at the head of the circle.

BOOLUNDSHUHUR REPORT.

Local kharee works: *additional evidence of their dangerous character.*

68. This circle contains important kharee lands, and the remarks of Mr. Freeander, the Deputy Inspector, on the adaptability of much of their produce to adulteration of edible salt, go to strengthen my own observations, in para. 28, and to prove the urgent need of better arrangements than now exist. Proposing to follow with a special report, I need not now enlarge on the subject.

Testimony of salt traders to the good effect of Act XXXI of 1861.

69. In his 14th para. Mr. Freeander asserts that he has gathered in conversation with salt merchants, evidence of their conviction that the provisions of Act XXXI of 1861 have exercised a beneficial effect on the salt trade at large.

Cause of local decline of seizures.

70. Unusual prevalence of rain, consequent closing of works, and the effect of the new rules, are reasonably assigned by Mr. Freeander to account for the seizures in his circle being fewer than usual. He adds that the influences which have prevented factories from working have likewise saved the revenue from injury.

BUDAON REPORT.

Alleged manufacture of salt in Rampore *is confined to saltpetre works.* *The saltpetre is made for the local Government.*

71. Mr. Jones, Deputy Inspector of Budaon, has heard of salt being made in Rampore, and traders allege that enough has been produced to discourage import. From a subsequent letter, it would appear that the manufacture is connected with and confined to crude saltpetre factories, of which over one hundred are said to exist in the Nawab's territory. The saltpetre is made under contract with the local Government at a fixed price of Rs. 2 per maund; and the makers are said to pay no ground rent.

Import of salt from Thibet *gauged at* 8,000 *maunds per annum.*

72. Mr. Jones also draws attention to the import of salt from Thibet, *vid* Gurhwal, first noticed by the Commissioner of Customs. He puts its import, into villages of Rohilkund, at 8,000 maunds yearly; and its price at from Rs. 7 to Rs. 7-8 per maund; but these

Price seems overstated.

figures require confirmation; the price, in especial, being apparently much overstated.

MUTTRA REPORT.

Deputy Inspector asserts that saline deposits have not been worked.

73. Mr. Kingston, Deputy Inspector of Muttra, in whose circle are extensive deposits of saline earths, reports, as matter of his own knowledge, that those earths have not been utilized. He has been much about the tracts, has satisfied himself, by actual inspection, that the surfaces have not been disturbed; and his assurance, that the capabilities of the Agra and Muttra districts have not, on any extended scale, been turned against us, may be accepted. Salt would be extensively made, were it not kept under. Mr. Kingston has apparently not neglected the important duty of watching the few kharee works of his circle.

Examination of salt deposit at Choormoora.

74. In accordance with the Commissioner's personal instructions, Mr. Kingston has measured the saline deposit at Choormoora, near Furrah, finding the area to be 15039·13 square yards. A square yard of the efflorescent surface yielded a seer and a half of saline matter. But the experiment seems incomplete, enabling us to form no idea of what the soil would yield on lixiviation; and I regard his estimate of one thousand maunds, from simple undisturbed efflorescence, as much beyond the fact. Mr. Bradford, late Collector of Muttra, estimated the yield of the tract at between three hundred and four hundred maunds. The lands would yield more, if worked, which would invite renewal of efflorescence, as the workable upper stratum was removed. The tract was, some time ago, made over to the care of the Patrol of Furrah, who was ordered to see that none of the spontaneously produced salt was removed until the rains set in. Two specimens of the deposit, lately taken by Mr. Kingston, yielded, on analysis as follows:—

Estimate of produce appears excessive.

Former estimate by Mr. Bradford, Collector of Customs.

The tract has been watched by the Patrol of Furrah.

Analysis of efflorescence.

No. 1.	
Silica	0·20
Clay	0·90
Sulphate of Soda	1·22
Common Salt	96·99
No. 2.	
Silica	0·60
Clay	2·00
Sulphate of Soda	6·10
Common Salt	90·42

Proposal to watch this deposit.

75. Mr. Kingston would place a guard of a jemadar and four men over this deposit; but it seems preferable to leave it under the care of the neighbouring Patrol, who can visit it daily, at need. The proposal to collect and sell the rough salt is not advisable.

Tendency of landholders to enhance rent of saltpetre lands.

76. With other officers, Mr. Kingston has remarked, among the influences which have combined to depress saltpetre manufacture, a tendency among landholders to enhance, rather than reduce, the fees demanded for permission to remove nitrous soil.

This circle was formerly under Mr. Adam.

77. This circle, up to August last, was still in the hands of Mr. R. M. Adam, who will shortly, I am glad to think, resume charge.

MENTION OF OFFICERS.

78. I may now say that, in my judgment, the following officers, Messrs. Freeander, Durant, Kingston, Adam (during four months), Melville Smith, Bradford, Bartlett, Ashton and Hardingham, have all done good service.

Mr. Ray, Inspector *specially noticed.*

79. Mr. Ray, Inspector of Customs, has been most useful; performing varied duties with great energy. During my absence on tour, he has, in the first instance, supervised the work of all my officers.

F. W. VERE,

Deputy Commissioner of Imperial Customs.

Annexure A.

North-Western Provinces.

Months.	Collections for 1866-67. Fees.	Fines on Factories and Sales.	Duty on Salt.	Total, 1866-67.	Total, 1867-68.	Collections for 1867-68. Fees.	Fines on Factories and Sales.	Duty on Salt.	Increase.	Decrease.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
*April	.....	.....	.....	.....	19,552 13 3	14,546 8 0	29 6 0	4,876 15 3	19,452 13 3	
May...	818 4 0	59 5 0	4,982 1 9	5,859 10 9	7,149 12 8	1,639 0 0	2 0 0	5,508 12 8	1,290 1 11	
June	228 8 0	92 2 6	6,819 15 6	7,140 10 0	5,733 9 9	73 0 0	7 8 0	5,653 1 9	.....	1,407 0 3
July...	2,834 0 0	16 9 2	4,285 0 5	7,135 9 7	4,746 11 2	1,494 0 0	11 10 3	3,241 0 11	.....	2,388 14 5
August	2,132 0 0	123 2 10	2,334 10 9	4,589 13 7	2,597 7 0	968 0 0	16 8 0	1,612 15 0	.....	1,992 6 7
September	366 0 0	1 0 0	2,170 7 0	2,537 7 0	1,839 11 5	570 0 0	10 0 0	1,259 11 5	.....	697 11 7
October	1,054 0 0	2 6 5	3,890 12 10	4,947 3 3	3,049 13 9	730 0 0	8 0 0	2,311 13 9	.....	1,897 5 6
November	3,044 0 0	3 0 0	3,589 0 4	6,636 0 4	4,826 6 3	3,168 8 0	0 8 0	1,657 6 3	.....	1,809 10 1
December	3,422 8 0	0 12 0	4,041 4 9	7,464 8 9	5,844 11 3	3,994 8 0	2 15 9	1,847 3 6	.....	1,619 13 6
January	2,466 8 0	3 2 0	5,512 12 10	7,982 6 10	6,179 11 9	4,227 0 0	9 7 1	1,943 4 8	.....	1,802 11 1
February	5,828 0 0	28 12 0	3,687 5 3	9,544 1 3	11,821 1 3	8,645 8 0	155 10 10	3,019 14 5	2,277 0 0	
March	9,874 8 0	39 15 9	5,718 9 3	15,633 1 0	13,792 0 0	10,787 0 0	7 12 0	2,997 4 0	.. ...	1,841 1 0
Total	32,068 4 0	370 3 8	47,032 0 8	79,470 8 4	87,033 13 6	50,843 0 0	261 5 11	35,929 7 7	23,119 15 2	15,456 10 0

* Here the eleven months of the last year are compared with twelve of this.

Total Increase	Rs.	23,019	15	2
Deduct Decrease	„	15,456	10	0
Net Increase	Rs.	7,563	5	2

Deputy Commr.'s Office,
Imperial Customs;
Agra, the 23rd April 1868.

F. W. VERE,
Depy. Commr. of Imperial Customs.

APPENDIX V
INTERNAL DEPT
N W P

Annexure B.

Annual Comparative Statement of Departmental Collections for 1867-68 *by Circles.*

Name of Customs Circle.	Amount of Collections in 1866-67.	Amount of Collections in 1867-68.	Increase.	Decrease.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A P.
Muttra	1,673 5 3	1,719 15 1	46 9 10	
Allygurh ...	11,747 15 1	18,204 5 2	6,456 0 1	
Boolundshuhur ...	1,710 3 2	2,048 5 2	338 2 0	
Budaon ...	1,409 1 1	2,908 12 7	1,499 11 6	
Mynpoorie	3,910 5 0	3,577 13 10	.....	332 7 2
Furruckabad ...	23,877 14 4	17,613 10 8	.....	6,264 3 8
Futtehpore ...	19,022 11 7	20,224 1 0	1,301 5 5	
Allahabad ...	5,493 4 8	7,051 11 6	1,558 6 10	
Banda ...	1,328 0 0	2,009 9 11	681 9 11	
Jounpore ...	1,161 5 4	5,074 11 6	3,913 6 2	
Ghazeepore ...	7,213 10 2	5,743 11 2	.....	1,469 15 0
Goruckpore ...	922 12 8	857 1 11	.....	65 10 9
Total .	79,470 8 4	87,033 13 6	15,795 9 9	8,132 4 7

Deputy Commr's. Office,
Imperial Customs;
Agra, the 23rd April 1868.

F. W. VERE,
Depy. Commr. of Imperial Customs.

Annexure C.

Memo. of Salt destroyed as impure by Circles.

Name of Circle.	1862-63.	1863-64.	1864-65.	1865-66.	1866-67.	1867-68.
	M. S. C.	M. S. C.	M. S. C.	M. S. C.	M. S. C.	M. S. C.
Muttra	877 21 8	21 5 0	499 9 12	29 24 0	590 13 0	292 38 14
Allygurh	415 8 12	303 9 4	465 30 0	.....	.....	
Boolundshuhur ..	0 28 0	.....	5 12 0	9 20 0	.....	0 30 0
Budaon ...	47 28 4	.....	.....	60 32 8	.....	3 30 0
Mynpoorie ..	133 0 0	.....	.....	.....	.....	
Furruckabad ...	1,226 0 0	271 32 0	275 0 8	234 32 8	144 28 4	138 22 0
Futtehpore ...	. ...	0 2 2	.....	17 33 0	.....	23 30 0
Allahabad ...	2 0 0	.....	267 0 0	.. ..	131 29 8	0 17 0
Banda	11 28 14	... ..	. ....	28 19 0	.....	
Jounpore	.. .	... ..	.....	1 0 0	3 15 12	
Ghazeepore .	....	.....	.....	.....	.....	
Goruckpore ..	0 27 0	.....	.....	6 15 5	4 34 0	26 14 8
Total .	2,714 25 6	596 8 6	1,512 12 4	388 16 5	875 0 8	486 22 6

Deputy Commrs'. Office,
Imperial Customs;
Agra, the 23rd April 1868.

F. W. VERE,
Depy. Commr. of Imperial Customs.

INTERNAL DEPT. OF THE IMPERIAL CUSTOMS FOR 1867-68.

Annexure D.

Comparative Statement of crude and refining Licenses issued in 1867-68.

Name of Circle.	Issued in 1866-67.		Issued in 1867-68.		Increase, A Licenses.	Increase, B Licenses.	Decrease, A Licenses.	Decrease, B Licenses.
	Licenses A.	Licenses B.	Licenses A.	Licenses B.				
Muttra	121	9	110	8	...	...	11	1
Allygurh	556	39	878	30	322	...	...	9
Boolundshuhur	106	6	120	2	14	...	...	4
Budaon	333	5	460	3	127	...	...	2
Mynpoorie	594	11	656	8	62	...	...	3
Furruckabad	469	31	405	21	...	...	64	10
Futtehpore	678	32	923	19	245	...	...	13
Allahabad	313	11	589	9	276	...	...	2
Banda	144	6	148	8	4	2	...	
Jounpore	295	2	1,669	4	1,374	2	...	
Ghazeepore	930	35	1,334	12	404	...	...	23
Goruckpore	114	3	97	3	...	...	17	
Total ...	4,653	190	7,389	127	2,828	4	92	67
Deduct Decrease in A Licenses ...	...	...	...	...	92			
Net Increase	...	...	...	...	2,736		...	
Deduct Increase in B Licenses ...	...	...	...	...	...	...	...	4
Net Decrease	...	...	...	...	...	...	...	63

Deputy Commr.'s Office,
Imperial Customs;
Agra, the 23rd April 1868.

F. W. VERE,
Depy. Commr. of Imperial Customs.

Annexure E.

Licenses of both Letters refused.

Name of Circle.	A.	B.	
Muttra	9		
Allygurh	1	1	and 2 A cancelled.
Boolundshuhur	3	...	
Budaon	1	...	
Mynpoorie	14	...	
Furruckabad	39	1	
Futtehpore	20	...	
Allahabad	51	...	
Banda	3	...	
Jounpore	24	...	
Ghazeepore	3	...	and 2 A ditto.
Total ...	168	2	

Deputy Commr.'s Office,
Imperial Customs;
Agra, the 23rd April 1868.

F. W. VERE,
Depy. Commr. of Imperial Customs.

APPENDIX V
INTERNAL DEPT
N W P

Annexure F.

Seized for working without License.

	Cases.		Men.		Committed for trial. Cases.		Men.	
	1866-67.	1867-68.	1866-67.	1867-68.	1866-67.	1867-68.	1866-67.	1867-68.
North Western Provinces ...	147	100	317	159	107	61	230	104

DEPUTY COMMR.'S OFFICE, IMPERIAL CUSTOMS; *Agra, the 23rd April* 1868.

F. W. VERE,
Depy. Commr. of Imperial Customs.

Annexure G.

Statement showing abstract of seizures by Circles for 1866-67 *and* 1867-68.

Name of Circle.	Cases of Seizures.		Quantity of Salt.		Men seized.	
	1866-67.	1867-68.	1866-67.	1867-68.	1866-67.	1867-68.
			M. S. C.	M. S. C.		
Muttra	9	8	0 19 12	3 15 15	39	26
Allygurh	51	24	87 13 0½	76 34 0	218	105
Boolundshuhur	25	11	33 13 14	9 1 10½	75	13
Budaon	36	16	2 9 14	1 2 10¼	88	20
Mynpoorie	57	49	30 34 2½	377 1 5½	196	233
Furruckabad	64	32	35 23 4	6 39 9½	142	50
Futtehpore	60	79	11 32 5	18 0 4½	236	275
Allahabad...	160	107	22 1 12	5 3 15	367	180
Banda	28	18	0 10 4	0 8 1	41	23
Jounpore	223	118	22 25 6	12 27 9	987	467
Ghazeepore	142	106	6 15 11	3 21 13	229	130
Goruckpore	63	25	0 36 8	0 13 5	83	25
TOTAL ..	918	623	253 35 13	514 10 2½	2,701	1,547

DEPUTY COMMR.'S OFFICE, IMPERIAL CUSTOMS; *Agra, the 23rd April* 1868.

F. W. VERE,
Depy. Commr. of Imperial Customs.

Annexure H.

List of Sums received from Magistrates' Courts on account of realized fines during the year 1867-68.

	Rs.	A	P.
Muttra	60	0	0
Allygurh	269	6	7
Etah	670	3	9
Moozuffernugger	10	0	0
Budaon	245	12	0
Bareilly	5	0	0
Mynpoorie	606	0	0
Etawah	509	13	6
Furruckabad	243	8	3
Shahjehanpore	120	15	9
Futtehpore	358	11	10
Cawnpore	340	13	6
Humeerpore	14	13	6
Allahabad	495	10	0
Mirzapore	95	0	0
Banda	10	0	0
Jaloun	20	0	0
Jhansie	20	0	0
Jounpore	1,746	12	6
Benares	66	0	0
Azimgurh	219	5	0
Ghazeepore	180	10	9
Goruckpore	28	12	0
Bustee	13	0	0
TOTAL	6,350	4	11

DEPUTY COMMR.'S OFFICE, IMPERIAL CUSTOMS; *Agra, the 23rd April* 1868.

F. W. VERE,
Depy. Commr. of Imperial Customs.

INTERNAL DEPT. OF THE IMPERIAL CUSTOMS FOR 1867-68.

Annexure I.

List of Men dismissed from the Deputy Commissionership of Customs, North-Western Provinces.

1 Superintendent, 2 Kotegushts, 4 Jemadars, 4 Lance Jemadars, 15 Peons,	Dismissed for minor acts of corruption.
1 Mohurir,	Dismissed for falsifying records and embezzling Government money. This man under Deputy Commissioner's order was prosecuted to conviction before a Sessions Court, and sentenced to rigorous imprisonment for three years, modified by the High Court at Agra on appeal to one year.
2 Mooshriffs,	Dismissed for deficiencies of salt at time of weighment.
1 Lance Jemadar, 1 Peon,	Dismissed for embezzling Government money, committed to their charge. The former of these was committed, for trial and sentenced to two years' imprisonment.
2 Kotegushts, 3 Peons,	Dismissed for making illegal seizures.
1 Kotegusht, 1 Jemadar, 1 Lance Jemadar, 11 Peons,	Dismissed for collusion with salt-makers.
2 Superintendents, 1 Clerk, 1 Peshkar, 6 Mooshriffs, 6 Kotegushts, 9 Jemadars, 9 Lance Jemadars, 1 Duftry, 97 Peons,	Dismissed for miscellaneous offences including cowardice, disobedience of standing orders, incompetence for position, persistent carelessness, neglect of duty and general evil repute, among many and various other misdemeanours.

DEPUTY COMMR.'S OFFICE,
IMPERIAL CUSTOMS;
Agra, the 23rd April 1868.

F. W. VERE,
Depy. Commr. of Imperial Customs.

Annexure J.

Statement of Saltpetre Exports for three official years.

	1867.	1866.	1865.	
	67,703	71,115	84,692	April 1867.
	56,531	104,962	82,051	May ,,
	21,399	51,470	42,980	June ,,
	27,100	40,651	52,315	July ,,
	21,672	33,325	28,640	August ,,
	21,374	45,506	23,853	September ,,
	12,699	18,835	58,677	October ,,
	10,740	26,290	59,449	November ,,
	41,118	39,792	64,272	December ,,
	58,938	42,044	52,526	January 1868.
	51,075	46,078	33,063	February ,,
	28,053	53,864	63,732	March ,,
TOTAL ...	418,402	573,932	646,250	

DEPUTY COMMR.'S OFFICE,
IMPERIAL CUSTOMS;
Agra, the 23rd April 1868.

F. W. VERE,
Depy. Commr. of Imperial Customs.

Appendix VI.

Review of the Administration of the Oudh Section of the Internal Branch of the Imperial Department of Customs for the official year 1867-68.

INTERNAL DEPT. OUDH. Its object

The Internal branch of the Imperial Department of Customs in Oudh is intended to prevent the illicit manufacture of salt in the province in question. Its operations extend over an area of 19,241 square miles, containing a population of 8,326,647 souls, sub-divided into 12 districts. For departmental purposes, these are arranged into five circles, at the head of each of which is a Deputy Inspector, who ranks as a Patrol. The executive force consists of 289 officers and men, and is controlled by an Assistant Commissioner, who ranks as a Collector, under the general supervision of the Deputy Commissioner of Customs.

and its internal economy.

FINANCIAL RESULTS. GROSS REALIZATIONS.

2. Collections amounting to Rs. 11,982-5-1, against Rs. 12,872-2-8 of 1866-67, showing a decrease of Rs. 889-13-7, for twelve months, against eleven. If, on the other hand, we compare twelve months with twelve the receipts of 1867-68 would be Rs. 14,042, and the decrease Rs. 2,060.

Details of the two official years, with which alone I shall concern myself, are as follows:—

Details of collections compared with those of 1866-67.

		1866-67.			1867-68.		
Fees	Rs.	3,757	0	0	3,821	8	0
Fines	„	6	0	0	67	14	11
Duty on Salt	„	9,109	2	8	8,092	14	2
TOTAL	Rs.	12,872	2	8	11,982	5	1

Fluctuations of income.

3. Receipts from fees have varied little; those for 1867-68 being but Rs. 64-8 in advance of those of the earlier year. Nor has duty on salt very greatly diminished, being, in 1867-68, but Rs. 1,016-4-6 below the income of 1866-67.

Cause of the equilibrium.

4. Briefly, I take the cause of the above *quasi-equilibrium* to be that saltpetre operations in Oudh had already gone nearly as low as they could, if the trade were to exist at all. It had received a downward impulse in 1865-66, when the bankruptcy of Sahoo Mukkun Lal took away the prop on which its crude workers had relied for years past. All through 1866-67 it languished in consequence; and would, probably, have died out altogether, had smaller capitalists not come forward and gathered up fragments of the practical monopoly enjoyed by the above-named firm.

Income of each month.

5. Annexure A of this Report is a comparative statement of income for each month under all headings; the realizations of the first four being greater, those of the last eight smaller, than in 1866-67.

Income of separate circles compared.

6. Annexure B exhibits the gross receipts by circles; two of which, Lucknow and Baraitch, have received more, and three, Hurdui, Roy Bareilly, and Pertabgurh, less than in 1866-67.

CHARGES compared with that of 1866-67.

7. Our Oudh expenditure has amounted to Rs. 54,164-9-8, against Rs. 48,240-11-1 in 1866-67, composed as in the following synopsis:—

		1866-67.	1867-68.
Pay ...	Rs.	45,204 9 10	50,741 15 11
Contingencies	„	3,036 1 3	3,422 9 9
TOTAL	Rs.	48,240 11 1	54,164 9 8

Cause of excess in 1867-68.

The difference, Rs. 5,923-14-7, is caused by having to pay for twelve months instead of eleven.

Excess of expenditure over income;

8. Under the above conditions, deducting the sum of Rs. 11,982 realized, from Rs. 54,164 expended, there remains a balance of Rs. 42,182, representing an average of Rs. 3,515 per mensem, which is what Government has paid for the watch kept over its great salt interest in Oudh.

but our gross outlay would be no heavy premium on protection in Oudh.

9. It is perhaps not superfluous to repeat that the whole cost of our establishment, unrelieved by any direct return, would be a light premium of insurance against the perils to which the interests of this Department are exposed in Oudh. Another fact may also be re-stated, *viz.*, that in 1864-65, at the end of the first complete year of our establishment in Oudh, we had cost the State but Rs. 782 per mensem; and that, had the saltpetre trade flourished, instead of drooping, we should long ago, here and in the North-West, have paid all our expenses, and now, yearly, be adding, directly, to the revenue. That we are absolutely disconnected with the disasters of this branch of commerce is well known, despite a recent assertion that we had "all but succeeded in abolishing the manufacture altogether."

With a flourishing trade in saltpetre, protection would have cost nothing.

Injury to the trade has not been the act of the Department.

ISSUE OF LICENSES.
Synopsis.

10. Annexure C affords a synopsis of issue of licenses throughout the province. Refining licenses have decreased by 7, as compared with the issues of 1866-67, while crude licenses have increased by 189. This latter feature is to be traced to the fact noted in para. 4, that an effort has been made to resuscitate the business of Sahoo Mukkun Lal.

PENAL ACTION OF THE DEPT.
SEIZURES.
Detail.

11. In Annexure D, I have to present a detail of the year's seizures, sub-divided among the Customs circles.

Favorable aspect of these statistics.

12. These figures bear an aspect on which we may congratulate ourselves. A standing reproach against us has been the number of persons whom we sent to jail for minimum quantities of salt. As admitted in para. 37 of my reply to Mr. Braddon, we administered the law in its rigor, which was, that salt was not to be made at all. To make a chittack, or to make a thousand maunds, were equally penal. But for many months we have been experimenting on a more lenient policy; and already our committals have dwindled to nearly one-fourth, although the sum of the salt seized has not declined in like proportion, as the following memorandum will show:—

The department had avowedly administered the law in its rigor,

but has now entered on trial of a more lenient system,

and committals have decreased by three fourths.

		1866-67.	1867-68.
Salt seized	Mds.	93-33-3	71-39-11

Further decrease is probable.

In the present year we may look for further diminution in figures of committals.

13. There is no denying the relief implied to the public by the rules, thought out in the Department, and introduced at its instance, which have wrought this effect.

Salt manufacture is still disallowed,

We still, in fact, totally disallow salt manufacture: we destroy all small quantities which we find; we still break up works and apparatus; but unless there is more than a seer of

salt, our action stops short at these mild penalties. Thus, a man of the poorer classes, who restricts himself to producing a little brine, which, be it noted, savours his food just as effectually as if he used the dry salt which he must buy, stands in no danger from us.

but to entail criminal process salt must exceed one seer.

PROSECUTIONS.

14. The result of these committals, compared with those of the preceding year, and shown below, is very distinctly in our favor :—

	1866-67.	1867-68.
Persons committed	1,947	596
Ditto punished	1,583	496
Ditto released	364	63
Ditto pending trial	...	37

Percentage of convictions on committals, compared with 1866-67.

Thus, while in 1866-67, we *lost* 18·69 per cent. of cases which we sent into Court, we have lost but 10·57, and gained in the year under review 83·72 per cent., against 81·30 in 1866-67.

Fewer persons have ventured on working without license.

15. Annexure E shows the number of persons seized for working without license. There is a notable diminution, as compared with the figures of last year, which may be taken to indicate growing disinclination to remain outside the pale of the law.

Proportion of paid fines.

16. Out of Rs. 5,469, imposed as fines by Criminal Courts, Rs. 3,051, or 55·78 per cent., are known to have been paid up to date. Last year, 57·20 per cent. were paid.

ESTABLISHMENT.
PUNISHMENTS.

17. Eighteen per cent. of the establishment were dismissed in 1866-67, and, in the year now reported on, 15·91. The difference needs no remark; but the figures will show that discipline has not been allowed to relax. For details, see Annexure F.

REVIEW OF DEPARTMENTAL REPORTS.

18. I will now offer a few remarks on the Departmental Reports.

ASSISTANT COMMISSIONER'S.

Influences depressing salt trade.

19. The Assistant Commissioner, Mr. Hay, enters on his report with discussions of the influences which have depressed salt trade during the year; and which are held by him to be, principally, the still enduring effect of an impression that salt works in Oudh were about to re-open, which repelled speculative investments, and impelled holders of stocks to clear these off. This latter movement sufficed to meet all demands of the market.

Re-opening of salt works anticipated.

Imports thereby repelled.

Adulteration of Western salts

20. On the alleged adulteration of Western salts with produce of kharee works, which has been no greater in the year reported on than in those which preceded it, which has, I believe, been kept down by that stress of weather which reduces the kharee makers to idleness; I have to repeat, from my North-Western Report, that without aid from the public, we are not competent to deal with it.

cannot be counteracted without aid from the public.

Mr. Hay's calculations of import of salt into Oudh.

21. Mr. Hay writes at length on the import of salt into Oudh, and states that he can *trace* but 9,38,708 maunds taken into the province; out of which he holds that 1,70,000 maunds have been in transit, leaving 7,68,708 maunds for internal consumption, independent of border imports, from the direction of Azimgurh. As his diaries, written on tour, have shown, this officer has been at great pains to acquire information, and it would hardly be possible to find a better man for the work. But that much more salt, than Mr. Hay has been able to trace *as import of the year*, has been used in Oudh, is, I think, evident, while such proof, as I shall proceed to adduce, will go to show scrupulous moderation and adherence to such results as his enquiries presented on the part of Mr. Hay.

Pains bestowed on the question;

but much salt has escaped registry.

Principal inlets of trade.

22. Two main channels of salt trade into Oudh, are Shahjehanpore and Cawnpore; and the trade by the latter can be very closely gauged. Our man, stationed at the Cawnpore Bridge, has registered 5,36,173 maunds. Mr. Bradford, who has made enquiries in Furruckabad and Shahjehanpore, sends 2,31,000 maunds as the export thence. This gives 7,67,173 maunds, from three inlets only; add Mr. Hay's estimate of 50,000 maunds of Eastern salt, which the Commissioner's own information on rail and river trade will enable him to adjudge as under-stated, and 8,17,000 maunds are attained, without any kind of allowance for imports by Allahabad, Jounpore, and Azimgurh. But we also know that in 1866-67, there was unusual activity of salt trade all over the area affected by the operations of the Imperial Customs. Universal, this affected Oudh among the rest, and thus, in April 1867, the markets in that province must have been just as well supplied as those in the North-West.

Quantity traded by these.
Mr. Hay under-rates Eastern imports.

Great activity known to have prevailed in imports in 1866-67,
the Oudh market has thus been well supplied.

Probable consumption of salt.

23. It will now be well to see what, according to latest light, is likely to be the real consumption of the country. Mr. Hay gives its population at 8,326,647 souls. In his last tours, he has made close enquiry into consumption by individuals, and finds that, while all classes, down to the very lowest, among which Mr. Hay has particularly pushed his enquiries, admit not only that they can readily obtain salt, but that they constantly consume all that they need, individual use does not exceed four and a half seers per head. This would entail consumption, by a population as above noted, of 9,36,748 maunds. Conjoining these figures with the fact vouched for by Mr. Hay, *viz.*, that holders of stock, scared by rumours, possessing far more than the usual substance, of a change of system, endeavoured to be rid of their accumulations, it is easy to see how any shortness of supply, as import, would be made good by drafts on stock in hand. And we know, by Mr. Hay's detailed reports from tour, pains-taking, searching, and written, unquestionably, in good faith, that salt was plentiful; and that the very poorest in the land, the very roadside beggar, found no difficulty in procuring his quantum. (*Vide* Annexure G).

Individual use limited to 4½ seers per head.

Any shortness of import would be compensated by drafts from old stocks.
Proofs that supply has been ample, and consumption unstinted.

Desirability of regular trade-writers.

24. As I have said in para. 47 of my North-Western Report, we shall never obtain really useful statistics without temporary use of trade-writers. I would, however note, that, as regards the figures tendered by me, the returns of the Cawnpore Bridge traffic are certainly reliable, and that those sent by Mr. Bradford, being less than his estimates of the two preceding years, are, at least, not open to suspicion of exaggeration.

Import of Thibet salts.

25. A certain ingress of salts, known as "*Bhooteea*" and "*Danga*" from Nepal, the former selling in the Terai, the latter at four seers per Rupee, is noted in para. 11 of Mr. Hay's report. The subject is also noted by Messrs. Kemp and Whitten.

Assistant Commissioner's remarks on financial features already anticipated.

26. Mr. Hay's remarks on the financial features of the year have been principally anticipated in my paras. 2 to 8.

BARAITCH REPORT
needs no reproduction.

27. All important matter, in the report of the Deputy Inspector of Baraitch, having been dealt with in various paras. of this General Review, need not be reproduced under special headings.

PERTABGURH REPORT.
Hindrances of weather.

28. Mr. Kemp, Deputy Inspector of Pertabgurh, notes a general retardation of saline manufactures under stress of weather.

Result of local inquiries into consumption of salt, by man and beast.

29. Writing independently of Mr. Hay, the result of Mr. Kemp's inquiries go to confirm the assertions of the former officer, that the population of Oudh is not unduly stinted in use

of salt; while his inquiries into former and existing consumption of salt by cattle, tend to much the same conclusion at which we arrive from information otherwise derived, *viz.*, that, as matter of fact, even when and where salt has been, and is cheapest, it has never been customary to give it largely or regularly to cattle: that in reality, it is given to so small a proportion of the live stock that its use for such purposes has never been sufficient to affect, in any appreciable degree, the general consumption of the province.

ROY BAREILLY REPORT.

30. The Deputy Inspector of Roy Bareilly, Mr. Whitten, writes in the most positive terms of the suppression of domestic manufacture; but with all respect for the vigilance and activity of a very deserving officer, the conclusion must be accepted with much reservation. In acknowledging assistance from district authorities, he describes a feature all the more gratifying for being less to be looked for, *viz.*, co-operation of land-holders and their agents. Whatever be the motive which has enlisted these on our side, the fact, which is one about which there can be no possibility of error, is very re-assuring.

Asserted suppression of domestic manufacture of salt, *to be taken with reserve.*

Assistance rendered by land-holders.

31. Information gathered by Mr. Whitten, on the subject of consumption of salt by cattle, strengthens the conclusion drawn in para. 29.

Consumption of salt by cattle.

LUCKNOW REPORT needs no reproduction.

32. The report of the Deputy Inspector of the Lucknow Circle contains nothing which calls for reproduction. The same may be said of that from the Hurdui Circle; not because the latter contains no matter of interest, but because all such has been dealt with elsewhere.

Effect of decline of saltpetre trade on those who followed it.

33. The inquiries of all our officers in Oudh substantiate the fact that dispossession of occupation as saltpetre makers, has inflicted no distress on the classes concerned, who have found abundant occupation in other lines.

NOTICE OF OFFICERS,

34. The Assistant Commissioner, Mr. Hay, and his subordinates, Messrs. Lyon, Kemp, Whitten, Dawes and Kenyon appear to have done their best to be useful. The Assistant Commissioner has exerted himself greatly to acquire statistic information. Among his subordinates, I select Mr. Whitten as specially deserving of notice.

Messrs. Hay and Whitten, *specially mentioned.*

F. W. VERE,
Deputy Commr. of Imperial Customs.

Annexure A.

OUDH.

Months.	Collections for 1866-67. Fees.	Fines on Factories and Sales.	Duty on Salt.	Total, 1866-67.	Total, 1867-68.	Collections for 1867-68. Fees.	Fines on Factories and Sales.	Duty on Salt.	Increase.	Decrease.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
* April	.....	.....	.....	.....	1,712 14 3	381 8 0	.....	1,331 6 3	1,712 14 3	.....
May	11 0 0	1 0 0	933 12 4	945 12 4	1,304 4 8	146 8 0	3 0 0	1,154 12 8	358 8 4	.....
June	2 0 0	.....	1,249 13 0	1,251 13 0	1,737 12 11	2 0 0	.....	1,735 12 11	485 15 11	.....
July	204 0 0	5 0 0	305 4 9	514 4 9	1,034 6 2	254 0 0	64 14 11	715 7 3	520 1 5	.....
August	258 0 0	.....	311 11 8	569 11 8	340 11 8	100 0 0	.....	240 11 8	.....	229 0 0
September	58 0 0	.....	605 10 1	663 10 1	225 1 7	2 0 0	.....	223 1 7	.....	438 8 6
October	230 0 0	.....	505 9 5	735 9 5	296 10 3	224 0 0	.....	72 10 3	.....	438 15 2
November	854 0 0	.....	514 14 6	1,368 14 6	753 5 5	536 0 0	.....	217 5 5	.....	615 9 1
December	980 0 0	.....	815 2 9	1,795 2 9	969 14 8	720 0 0	.....	249 14 8	.....	825 4 1
January	580 0 0	.....	835 7 6	1,415 7 6	1,408 12 0	858 0 0	.....	550 12 0	.....	6 11 6
February	282 0 0	.....	1,477 7 3	1,759 7 3	762 5 1	259 0 0	.....	503 5 1	.....	997 2 2
March	298 0 0	.....	1,554 5 5	1,852 5 5	1,436 2 5	338 8 0	.....	1,097 10 5	.....	416 3 0
TOTAL ...	3,757 0 0	6 0 0	9,109 2 8	12,872 2 8	11,982 5 1	3,821 8 0	67 14 11	8,092 14 2	3,077 7 11	3,967 5 6

* Here the eleven months of the last year are compared with twelve of this.

Total decrease	3,967	5 6
Deduct increase	3,077	7 11
Net decrease	889	13 7

DEPUTY COMMR.'S OFFICE,
IMPERIAL CUSTOMS;
Agra, the 23rd April 1868.

F. W. VERE,
Depy. Commr. of Imperial Customs.

INTERNAL BRANCH OF THE IMPERIAL DEPT. OF CUSTOMS, 1867-68.

Annexure B.

Annual Comparative Statement for 1866-67 *and* 1867-68, *showing increase and decrease by Circles.*

Name of Customs Circle.	Amount of collections in 1866-67.	Amount of collections in 1867-68.	Increase.	Decrease.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Lucknow... ...	2,858 7 1	3,500 4 10	641 13 9	0 0 0
Hurdui	2,374 13 5	1,937 3 3	0 0 0	437 10 2
Roy Bareilly ...	3,465 13 4	2,438 6 10	0 0 0	1,027 6 6
Pertabgurh ...	1,819 1 8	1,583 7 10	0 0 0	235 9 10
Baraitch	2,353 15 2	2,522 14 4	168 15 2	0 0 0
Total ...	12,872 2 8	11,982 5 1	810 12 11	1,700 10 6

Deputy Commr.'s Office,
Imperial Customs;
Agra, the 25th April 1868.

F. W. VERE,
Depy. Commr. of Imperial Customs.

Annexure C.

Comparative Statement of crude and refining Licenses, issued in 1866-67 *and* 1867-68.

Name of Circle.	Issued in 1866-67.		Issued in 1867-68.		Increase, A Licenses.	Increase, B Licenses.	Decrease, A Licenses.	Decrease, B Licenses.
	Licenses, A.	Licenses, B.	Licenses, A.	Licenses, B.				
Lucknow	179	9	262	10	83	1	...	...
Hurdui	453	9	342	6	...	...	111	3
Roy Bareilly ...	59	6	74	6	15	...	...	...
Pertabgurh ...	38	4	230	1	192	...	...	3
Baraitch	251	8	261	7	10	...	...	1
Total ...	980	36	1,169	30	300	1	111	7
Deduct Decrease in A Licenses ...	.....	.....	.....	.....	111			
Net Increase ...	.....	.....	.....	.....	189			
Deduct Increase in B Licenses ...	.....	.....	.....	.....	...	...	...	1
Net Decrease ...	.....	.....	.....	.....	...	...	...	6

Deputy Commr.'s Office,
Imperial Customs;
Agra, the 25th April 1868.

F. W. VERE,
Depy. Commr. of Imperial Customs.

REVIEW OF ADMINISTRATION OF THE OUDH SECTION OF THE

Annexure D.

Statement showing Abstract of Seizures by Circles for 1866-67 *&* 1867-68.

Name of Circle.	Cases of Seizures.		Quantity of Salt.		Men seized.	
	1866-67.	1867-68.	1866-67.	1867-68.	1866-67.	1867-68.
			M. S. C.	M. S. C.		
Lucknow.	178	144	28 15 12	39 10 15	363	190
Hurdui	64	39	3 6 0	3 26 1	83	50
Roy Bareilly	199	98	30 21 14	5 8 12	941	310
Pertabgurh	219	127	30 18 12	22 5 13	790	435
Baraitch	50	44	1 10 13	1 28 2	60	50
Total ...	710	452	93 33 3	71 39 11	2,237	1,035

Deputy Commr.'s Office;
Imperial Customs,
Agra, the 25th May 1868.

F. W. VERE,
Depy. Commr. of Imperial Customs.

Annexure E.

Seized for working without License.

	Cases.		Men.		Committed for trial.			
					Cases.		Men.	
	1866-67.	1867-68.	1866-67.	1867-68.	1866-67.	1867 68.	1866-67.	1867-68.
Oudh	67	40	86	42	46	27	62	27

Deputy Commr.'s Office,
Imperial Customs;
Agra, the 25th April 1868.

F. W. VERE,
Depy. Commr. of Imperial Customs.

Annexure F.

List of Men dismissed from the Assistant Commissionership of Customs, Oudh.

2 Mooshriffs	Dismissed for producing unduly small out-turn of salt.
1 Peon	Dismissed for loss of salt in his charge.
1 Peon	Dismissed for misapplication of a sum of twelve annas, Government money, entrusted to his charge.
1 Kotgusht ... ... 1 Jemadar	Dismissed for false report on the nature of soil which they were ordered to inspect.
2 Clerks ... ... 2 Mooshriffs ... ... 35 Peons	Dismissed for miscellaneous offences.

Deputy Commr.'s Office,
Imperial Customs;
Agra, the 25th April 1868.

F. W. VERE,
Depy. Commr. of Imperial Customs.

INTERNAL BRANCH OF THE IMPERIAL DEPT. OF CUSTOMS, 1867-68.

Annexure G.

Extracts from Diaries of the Assistant Commissioner of Customs in Oudh.

"Met a beggar woman, who asked for alms: she had half a "seer of three kinds of Western salt, two chittacks of parched "gram, and as much parched rice. Said she would exchange "the salt for grain, if, by evening, she did not get more for "herself, and her blind brother. I mention this fact as a symp- "tom of the abundance of salt among the inhabitants there- "abouts, and a non-salt producing neighbourhood."

"Visited the inhabitants of Pulree, and took accounts of "the consumption of salt. All said they eat it; could not do "without it; found no difficulty in getting as much as they "wanted at any time. That the bunniah of the village always "had a supply; and if even he fell short, there was abundance "at the '*Gunj*' close by."

"Visited the villages of Tendonla, Kujurgaon, Madhopore, "and Bustee. Took Meer Wajid Ullee, Talookdar, with me. I "need not detail my inquiries. All the inhabitants were well "supplied with salt: all ate it: laughed at my asking if any "man went without it; said that the *Ghureeb Kangal* who ate "only atta, always took his two cowries' worth of salt, and the "bunniahs said that they always gave it."

"Went out to inquire about salt. Entered into conversation "with about fifty people on the road-side. Their average meals "a day consisted of fourteen chittacks of atta, two chittacks of "dâl, sometimes a pice worth, and sometimes half a pice worth of "ghee, each man: but always with the atta and dâl never less "than one pice weight of salt is used, which is equal to eleven "and a half mashas, or four seers fourteen and a half chittacks "of salt per annum. They said they never heard of any one "eating meals without salt, or sugar, unless it was parched gram. "That a fuqueer in the jungle may have bread cooked given to "him, and the owner forget to give him a grain of salt with it; "but that no one, buying his own food however so little, would "forget to ask for the necessary quantity of salt."

"Met an instance of Mr. Braddon's extreme cases of "poverty. One old man and woman and two children, six and "eight years old, respectively. Income of family, six pice a day. "Were living in an almost roofless hut, in the fields by itself. "Had a brass lotah, three wooden plates, and a grindstone con- "stitute their possessions. They had not a rezaie to cover them "during the cold nights; they lived on the coarsest grain which "she ground to meal. Consumption of this meal among the "four, two seers per day, with a quarter of a pice worth of salt. "They do not know the weight; know what the '*chootkee*' "ought to be, and that the bunniah always gives it."

"Visited two villages on my way. The inhabitants said "they never wanted salt, and could not exist without it. That "it was very cheap when made at Bynswâra. Said they *heard* "of Customs people; had no complaints against them. Retail "rate of salt eight pice weight per pice; the pice in weight is "about one tolah. The bunniah on the road side at Kendoulee "says that the very poorest people, who eat atta only, always "take from him a "*chootkee*" of salt to eat with their cakes, "that he has sold atta, or dâl or ghee, or all these things, but "seldom without salt: that those who sometimes do not take it

"with the other things, is because they have a supply on hand; "or who take salt only, having none, are the well-to-do people. "That the poor man, who buys his meal daily, takes his salt with "it. That he loses so much by those who do not pay their "six cowries for it, that he is obliged to sell at the rate of six "and a half seers per Rupee. His shop is on the road side, "and his principal sales are to travellers, all of whom do not pay "for their salt; which accounts for the high price to those who "do. That the income from salt is such a trifle, that he sells "Kuteela and Gooraree at the same price, and to residents of "the place, at prime cost. That he makes nothing by the salt; "only keeps it to accommodate his customers; for if he had none, "they would not take atta and dâl from him, but would pass "on to another shop. States that even the purchaser of parched "gram generally asked for a pinch of salt to eat with it; and "that in the whole course of his life, he never heard of any one, "except a '*bhugut fuqueer*,' who, atoning for his sins, denied "himself salt, as well as other necessaries."

(True Extracts)

F. W. VERE,

Depy. Commr. of Imperial Customs.

No. 1.

Comparative Statement showing the actual Receipts and Charges in the several Customs Houses subordinate to the Governments of the North Western Provinces, Punjab, Central Provinces, and Hyderabad, during the years 1866-67 *and* 1867-68.

CUSTOMS HOUSES.	Gross Collections.								Charges.		Net Collections.		Percentage of Charges on Gross Collections.	
	Salt.		Sugar.		Miscellaneous.		Total.							
	1866-67.	1867-68.	1866-67.	1867-68.	1866-67.	1867-68.	1866-67.	1867-68.	1866-67.	1867-68.	1866-67.	1867-68.	1866-67.	1867-68.
													Rs. A. P.	Rs. A. P.
Sirsa	17,953	21,576	92,300	81,668	1,209	1,919	1,11,463	1,05,164	81,781	93,016	29,681	12,148	73 5 11	88 7 2
Hansie	13,98,812	15,44,360	2,48,007	2,79,700	1,802	913	16,48,622	18,24,973	76,488	88,446	15,72,133	17,36,527	4 10 2	4 13 6
Delhi	24,17,659	26,39,113	3,86,596	5,61,711	3,668	6,724	28,07,923	32,07,548	1,36,894	1,59,450	26,71,029	30,48,098	4 14 0	4 15 6
Total Punjab Section...	38,34,424	42,05,049	7,26,903	9,23,079	6,679	9,556	45,68,007	51,37,685	2,95,163	3,40,912	42,72,843	47,96,773	6 7 4	6 10 2
Muttra	12,81,643	12,46,257	1,23,756	1,65,548	1,564	1,246	14,06,963	14,13,052	80,309	83,683	13,26,654	13,29,369	5 11 3	5 14 9
Agra	30,10,194	28,96,994	1,95,027	3,77,112	2,207	3,642	32,07,428	32,77,748	1,77,370	1,92,087	30,30,058	30,85,661	5 8 6	5 13 9
Jhansie	3,84,403	3,67,301	62,437	91,196	938	2,131	4,47,778	4,60,628	1,59,462	1,73,827	2,88,316	2,86,801	35 9 9	37 12 3
Total N. W. Provinces ..	46,76,240	45,10,552	3,81,220	6,33,856	4,709	7,019	50,62,169	51,51,428	4,17,141	4,49,597	46,45,028	47,01,831	8 3 10	8 11 7
Saugor	8,39,697	7,71,722	31,122	42,201	2,171	7,110	8,72,990	8,21,033	1,04,434	1,36,941	7,68,556	6,84,092	11 15 4	16 10 10
Hoshungabad	1,11,425	97,827	6,838	12,981	7,285	5,255	1,25,548	1,16,063	1,21,645	1,05,392	3,903	10,671	97 0 9	90 12 10
Nagpore	3,28,826	5,31,448	10,714	10,881	5,868	6,228	3,45,409	5,48,557	1,41,562	1,59,680	2,03,847	3,88,877	40 15 8	29 1 9
Raipore	2,52,565	2,72,862	346	454	9,671	15,448	2,62,582	2,88,764	50,037	65,963	2,12,546	2,22,801	19 0 10	22 13 6
Total C. P. ...	15,32,513	16,73,859	49,020	66,518	24,995	34,041	16,06,529	17,74,417	4,17,678	4,67,976	11,88,852	13,06,441	26 0 2	26 5 11
Grand Total ...	1,00,43,177	103,89,460	11,57,144	16,23,453	36,383	50,617	1,12,36,705	1,20,63,530	11,29,982	12,58,485	101,06,723	1,08,05,045	10 0 11	10 6 10
Berar commencing from 8th October 1867 ...	.....	95,701	.....	1,028	.....	13	....	96,743	.....	*... ..	.....	.....	.....	.....

* Berar charges are pending adjustment.

COMMISSIONER'S OFFICE;
IMPERIAL CUSTOMS,
Agra, the 23*rd April,* 1868.

ALLAN HUME,
Commissioner of Imperial Customs.

No. 2.

Comparative Statement of Collections in the several Customs Houses, subordinate to the Governments of the North Western Provinces, Punjab, Central Provinces and Hyderabad, showing the quantity of Salt, and refined and unrefined Sugar, for the official year 1867-68.

	SALT.				SUGAR.																			
	1867-68.		1866-67.		1867-68.																			
					Refined.				Unrefined.				Total.											
	Quantity.	Duty.	Quantity.	Duty.	1867-68.	1866-67.			1867-68.		1866-67.		1867-68.		1866-67.		Increase.		Decrease.		Increase.		Decrease.		Increase.		Decrease.	
	Maunds.	Rupees.	Maunds.	Rupees.	Quantity.	Quantity.	Duty.		Quantity.	Duty.	Quantity.	Duty.	Quantity.	Duty.	Quantity.	Duty.	Quantity.	Duty.	Quantity.	Duty.	Quantity.	Duty.	Quantity.	Duty.	Quantity.	Duty.	Quantity.	Duty.
Sirsa	7,241	21,570	6,025	17,953	36,447	33,085	33,086		1,30,668	46,221	1,57,905	39,215	1,67,034	81,688	1,90,830	92,300	1,314	3,021	...	...	3,362	3,362	...	...	...	...	37,317	13,691	...	...	33,953	10,632
Hansie	6,14,757	18,44,360	4,68,271	13,98,812	2,07,707	1,91,963	1,61,965		1,91,977	71,992	2,28,443	86,042	3,99,684	2,79,700	3,91,407	2,48,007	48,016	1,45,548	...	...	45,742	45,742	...	...	...	...	27,465	14,049	8,277	31,693	...	...
Delhi	9,79,704	29,39,113	8,05,890	24,17,670	3,56,197	3,25,197	2,98,291		3,56,703	2,06,514	4,76,479	1,78,305	6,82,900	5,61,711	6,83,770	3,81,536	73,814	2,21,454	...	...	1,46,906	1,46,906	...	...	75,224	28,209	...	...	2,23,129	1,75,115	...	...
Total Punjab Section ...	16,01,732	48,05,043	12,78,187	38,34,434	5,99,350	5,50,251	4,93,341	4,93,311	6,83,267	3,23,727	8,62,826	3,23,562	13,62,618	9,23,079	12,66,105	7,28,903	1,23,645	3,70,023	...	...	1,96,010	1,96,010	...	...	75,224	28,209	74,783	28,043	2,20,406	2,05,899	33,955	10,632
Muttra	4,15,419	12,46,257	4,27,227	12,81,681	1,10,695	1,10,695	85,739	85,739	1,46,545	54,953	1,01,362	38,016	2,57,197	1,65,648	1,87,120	1,23,756	...	...	11,993	35,396	23,857	23,857	...	...	45,190	16,935	...	...	70,017	41,792	...	...
Agra	9,65,654	28,96,994	10,03,208	30,10,194	2,88,552	2,69,853	1,44,213	1,44,213	2,61,478	99,559	1,35,488	50,814	5,38,031	3,77,112	2,79,710	1,95,027	...	...	37,733	1,13,200	1,42,340	1,42,340	...	...	1,05,981	39,745	...	...	2,48,321	1,82,085	...	...
Jhansie	1,22,432	3,67,301	1,26,134	3,84,403	63,341	63,341	43,468	43,468	74,272	27,855	59,527	18,949	1,37,613	91,323	94,015	62,437	...	...	5,701	17,103	19,833	19,833	...	...	23,745	8,905	...	...	43,578	28,738	...	...
Total N. W. P. ...	15,03,505	45,10,552	15,68,750	46,76,240	4,62,588	4,50,889	3,73,420	3,73,420	4,62,295	1,73,367	2,97,377	1,07,779	9,32,781	6,33,956	5,60,845	3,81,220	...	...	55,243	1,65,698	1,87,030	1,87,051	...	...	1,74,896	65,585	...	...	3,61,936	3,52,626	...	...
Sangor	2,97,240	7,71,722	2,79,698	8,35,697	37,142	37,142	26,534	26,534	18,480	5,668	12,232	4,587	30,632	32,201	38,766	31,132	...	...	22,858	67,974	10,508	10,508	...	...	1,256	472	...	...	11,885	11,080	...	...
Hoshungabad	39,708	97,927	47,993	1,11,425	12,981	12,981	6,838	6,838	...	...	...	...	12,981	12,981	6,838	6,838	...	...	6,091	13,588	6,143	6,143	...	...	...	...	...	...	6,143	6,143	...	...
Nagpore	3,61,906	8,31,448	2,15,241	3,28,826	10,981	10,981	10,714	10,714	...	...	...	...	10,981	10,981	10,714	10,714	1,36,665	2,03,621	...	...	167	167	...	...	...	...	...	...	167	167	...	...
Raipore	1,91,908	3,72,962	1,69,876	2,22,595	455	454	346	346	...	...	...	...	454	454	346	346	13,332	20,297	...	...	108	108	...	...	...	...	...	...	108	108	...	...
Total C. P. ...	8,30,852	20,73,959	7,11,108	15,22,543	61,558	61,458	44,432	44,432	18,480	5,668	12,232	4,587	54,948	56,616	56,664	49,030	1,50,197	2,23,918	30,757	81,571	17,026	17,025	...	...	1,256	472	...	...	18,283	17,497	...	...
Grand Total ...	37,36,101	1,03,89,461	35,48,345	1,00,43,177	11,21,496	11,01,299	7,21,219	7,21,219	13,39,050	5,02,154	11,82,435	4,35,931	24,90,346	18,23,653	18,83,570	11,57,144	2,73,742	5,93,541	86,998	2,47,069	4,00,064	4,00,086	...	...	2,51,367	94,266	74,782	28,043	6,10,625	4,76,941	33,955	10,632
															Deduct Decrease ...		63,903	2,47,069	...	...	...	...	...	74,782	28,043	...	...	33,955	10,632	...	...
															Net Increase ...		1,87,747	3,16,381	...	...	4,00,064	4,00,086	...	...	1,76,585	66,223	...	...	5,76,670	4,66,309	...	...
Berar	*63,589	93,701	...	...	1,028	1,028	...	...	...	...	...	...	1,028	1,028	...	...	63,799	93,701	...	...	1,028	1,028	...	...	...	...	...	...	1,028	1,028	...	...

* Commencing from 8th October 1867.

COMMISSIONER'S OFFICE,
IMPERIAL CUSTOMS;
Agra, the 23*rd April* 1868.

ALLAN HUME,
Commissioner of Imperial Customs.

Comparative Statement of Cost of Establishment of the Commissioner of Imperial Customs' Office as it stood on the 1st May 1859, and as now sanctioned, 1st April 1868.

	Monthly Cost of Establishment.		Annual Cost of Establishment.		Length of Jurisdiction in Miles.		Total Amount of Collections including Double Duty, &c.		Annual Charge per Mile of Line.		Annual Charge per cent. on Collections.	
	On the 1st May 1859.	As now sanctioned.	In 1859.	As now sanctioned.	On the 1st May 1859.	On the 1st April 1868.	From 1st May 1858 to 30th April 1859.	From 1st April 1867 to 31st March 1868.	In 1859.	In 1868.	In 1859.	In 1868.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.			Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Commissioner of Imperial Customs' Office...	1,111 0 0	1,100 0 0	13,332 0 0	12,100 0 0	907½	2,138½	61,64,362 0 0	1,21,60,273 0 0	14 11 2	5 10 6	0 3 6	0 1 7

COMMISSIONER'S OFFICE;
IMPERIAL CUSTOMS,
Agra, the 23rd April 1868.

ALLAN HUME,
Commissioner of Imperial Customs.

STATEMENT A.

B.

Comparative Statement of Cost of Collector's Sudder Offices as they stood on the 1st May 1859, and as now sanctioned, 1st April 1868.

	Monthly Cost of Establishment.		Annual Cost of Establishment.		Length of the Customs' Line.		Total amount of Collections including Double Duty, &c.		Annual Charge per Mile of Line.						Annual Charge per cent. on Collections.					
									In 1859.			In 1868.			In 1859.			In 1868.		
	On the 1st May 1859.	As now sanctioned.	In 1859.	As now sanctioned.	On the 1st May 1859.	On the 1st April 1868.	From 1st May 1858 to 30th April 1859.	From 1st April 1867 to 31st March 1868.												
	Rs.	Rs.	Rs.	Rs.			Rs.	Rs.	Rs.	As.	P.	Rs.	A.	P.	Rs.	As	P.	Rs.	As.	P.
Sirsa	395	290	4,740	3,480	117	123	65,638	1,05,164	40	8	2	28	4	8	7	3	6	3	4	11
Hansie	529	395	6,336	4,740	85	68½	13,78,207	18,24,973	74	8	8	69	3	2	0	7	4	0	4	1
Delhi	768	625	9,216	7,500	103	96½	13,19,257	32,07,548	89	7	7	77	11	6	0	11	2	0	3	9
Muttra	597	523	7,164	6,276	52½	52½	11,31,370	14,13,052	136	7	3	119	8	8	0	10	1	0	7	1
Agra	741	690	8,892	8,280	109½	105	18,07,317	32,77,748	81	3	3	78	13	8	0	7	10	0	4	0
Jhansie	381	459	4,572	5,508	162¼	167	1,31,468	4,60,628	28	2	10	32	15	8	3	7	7	1	3	1
Saugor	605	415	7,260	4,980	115	146¾	2,45,690	8,21,033	63	2	1	33	14	11	2	15	3	0	9	8
Hoshungabad	503	370	6,036	4,440	163	289	85,415	1,16,063	37	0	6	15	5	10	7	1	0	3	13	2
Nagpore	...	422	...	5,064	...	456¼	...	5,48,557	0	0	0	11	1	7	0	0	0	1	1	8
Raipore	...	302	...	3,624	...	300	...	2,88,764	0	0	0	12	1	3	0	0	0	1	4	1
Berar	...	174	...	2,088	...	334	...	96,743*	0	0	0	6	4	0	0	0	0	1	1	3
Total...	4,518	4,665	54,216	55,980	907¼	2,138½	61,64,362	1,21,60,273	59	10	4	26	2	10	0	12	3	0	7	2

* These are the collections from October 1867 to March 1868.—The percentage of charges thereon is accordingly for the same period.

Commissioner's Office;
Imperial Customs,
Agra, the 23rd April 1868.

ALLAN HUME,
Commissioner of Imperial Customs.

C.

Comparative Statement of Cost of the Mofussil Customs' Establishments exclusive of Commissioner's and Collectors' Offices, as they stood on the 1st May 1859 and as now sanctioned, 1st April 1868.

	Monthly Cost of Establishment.		Annual Cost of Establishment.		Length of the Customs Line.		Total Amount of Collections including Double Duty, &c.		Annual Charge per Mile of Line.		Annual Charge per cent on Collections.	
	On the 1st May 1859.	As now sanctioned.	In 1859.	As now sanctioned.	On the 1st May 1859.	On the 1st April 1868.	From 1st May 1858 to 30th April 1859.	From 1st April 1867 to 31st March 1868.	In 1859.	In 1868.	In 1859.	In 1868.
Sirsa	5,883	6,738	70,596	80,856	117	123	65,638	1,05,164	603 6 1	657 5 10	107 8 10	76 14 2
Hansie	6,419	5,888	77,028	70,656	85	68½	13,78,207	18,24,973	906 3 4	1,031 7 7	5 9 5	3 13 11
Delhi	11,121	10,345	1,33,452	1,24,140	103	96½	13,19,257	32,07,548	1,295 10 4	1,286 6 9	10 1 10	3 13 11
Muttra	5,597	5,509	67,164	66,108	52½	52½	11,31,370	14,13,052	1,279 5 0	1,259 3 2	5 14 11	4 10 11
Agra	9,633	10,141	1,15,596	1,21,692	109½	105	18,07,317	32,77,748	1,055 10 8	1,158 15 6	6 6 4	3 11 4
Jhansie	9,352	13,086	1,12,224	1,57,032	162¼	167	1,31,468	4,60,628	691 10 9	940 4 11	85 5 9	34 1 5
Saugor	7,738	9,003	92,856	1,08,036	115	146¾	2,45,690	8,21,033	807 7 1	736 3 0	37 12 8	13 2 6
Hoshungabad ...	7,097	6,263	85,164	75,156	163	289	85,415	1,16,063	522 3 4	260 0 10	99 11 3	64 12 0
Nagpore	...	10,697	.....	1,28,364	...	456¼	.....	5,48,557	.....	281 5 6	.....	23 6 4
Raipore	...	3,107	.....	37,284	...	300	.....	2,88,764	.....	124 4 5	.....	12 14 7
Berar	...	10,951	.....	1,31,412	...	334	.....	*96,743	.....	393 7 2	.....	67 14 8
Total ...	62,840	91,728	7,54,080	11,00,736	907¼	2,138½	61,64,362	1,21,60,273	831 2 9	514 11 7	12 3 8	8 8 2

* These are the collections from October 1867 to March 1868. The percentage of charges thereon is accordingly for the same period.

Commissioner's Office;
Imperial Customs,
Agra, 23rd April 1868.

ALLAN HUME,
Commissioner of Imperial Customs.

D.

Comparative Statement of Cost of Mofussil Customs' Establishments exclusive of Patrols, Assistant Patrols, Salt Establishment and Stationery Charges, as it stood on the 1st May 1859, and as now sanctioned, 1st April 1868.

	Monthly Cost of Establishment.		Annual Cost of Establishment.		Length of the Customs Line.		Total Amount of Collections including Double Duty, &c.		Annual Charge per Mile of Line.		Annual Charge per Cent. on Collections.	
	On the 1st May 1859.	As now sanctioned.	In 1859.	As now sanctioned.	On the 1st May 1859.	On the 1st April 1868.	From 1st May 1858 to 30th April 1859.	From 1st April 1867 to 31st March 1868.	In 1859.	In 1868.	In 1859.	In 1868.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Sirsa	4,286	1,788	51,432	57,156	117	123	65,638	1,05,164	439 9 5	467 1 1	78 5 8	51 10 1
Hansie	5,015	4,328	60,510	51,936	85	68½	13,78,207	18,24,973	712 3 9	758 3 0	4 6 3	2 13 6
Delhi	7,969	6,728	95,628	80,736	103	96½	13,19,257	32,07,548	928 6 10	836 10 3	7 3 11	2 8 3
Muttra	4,224	3,937	50,688	47,244	52½	52½	11,31,370	14,13,052	965 7 9	899 14 2	4 7 8	3 5 5
Agra	6,033	7,198	72,396	86,376	109½	105	18,07,317	32,77,748	661 2 5	822 10 0	4 0 1	2 10 2
Jhansie	7,391	10,381	88,692	1,24,572	162¼	167	1,31,468	4,60,628	546 10 2	745 15 0	67 7 4	27 0 8
Saugor	5,752	6,931	69,024	83,172	115	146¾	2,45,690	8,21,033	600 3 4	566 12 2	28 1 6	10 2 1
Hoshungabad	5,655	4,969	67,860	59,628	163	289	85,415	1,16,063	416 5 1	206 5 2	79 7 2	51 6 0
Nagpore	...	7,985	.....	95,820	...	456¼	.....	5,48,557	.....	210 0 3	.....	17 7 6
Raipore	...	2,375	.....	28,500	...	300	.....	2,88,764	.....	95 0 0	.....	9 13 11
Berar	...	9,547	.....	1,14,564	...	334	.....	*96,743	.....	343 0 1	.....	59 3 4
Total ...	46,355	69,167	5,56,260	8,30,004	907¼	2,138½	61,64,362	121,60,273	613 2 0	388 2 0	9 0 4	6 5 8

* These are the collections from October 1867 to March 1868. The percentage of charges thereon is accordingly for the same period.

COMMISSIONER'S OFFICE;
IMPERIAL CUSTOMS,
Agra, the 23rd April 1868.

ALLAN HUME,
Commissioner of Imperial Customs.

E.

Statement showing the Quantity of Goods seized on Head Loads, and the number of Head Load Salt Smugglers apprehended, during the year 1867-68, *as compared with* 1866-67.

CUSTOMS HOUSES.	Salt.				Sugar.				Number of Head Load Salt Smugglers seized.		Remarks.
	1867-68.		1866-67.		1867-68.		1866-67.				
	No. of Head Loads.	Number of maunds.	No. of Head Loads.	Number of maunds.	No. of Head Loads.	Number of maunds.	No. of Head Loads.	Number of maunds.	1867-68.	1866-67.	
Sirsa	157	151	171	139	12	2	7	1	1	22	
Hansie	77	50	122	77	98	10	94	13	5	13	
Delhi	159	90	200	82	474	37	567	50	81	66	
Muttra	182	108	257	187	16	4	14	5	169	161	
Agra	185	85	102	45	34	12	31	11	101	70	
Jhansie	292	160	376	113	8	2	10	3	466	488	
Saugor	2,127	1,120	697	353	.....	.....	.....	.....	259	160	
Hoshungabad	174	86	181	80	.....	.....	.....	.....	119	82	
Nagpore	157	20	71	14	2	.....	2	1	157	71	
Raipore	553	188	668	327	.....	.....	.....	.....	560	668	
Berar	10	3	.....	.....	.....	.....	.....	.....	10	.....	
Total ...	4,078	2,061	2,845	1,417	644	67	725	83	1,928	1,801	

Commissioner's Office;
Imperial Customs,
Agra, the 23rd April 1868.

ALLAN HUME,

Commissioner of Imperial Customs.

F.

Statement of Cases of Seizures reported to the Revenue Commissioners, or otherwise disposed of by the Collectors of Customs in the North-Western Provinces, Punjab and Central Provinces, for the year 1867-68.

Customs Houses.	Description and quantity of Goods seized.			Grounds of seizure and detail of cases.			Total number of cases of seizures.	No. of cases ordered by Collectors or Comm. of Customs.		Total number of cases disposed of by Collectors or Commissioner of Customs.	Number of cases reported to Revenue Commissioner.			Total number of cases reported to Revenue Commissioners.	Number of cases in which Collectors' orders have been			Total number of cases decided by Revenue Commissioners.	Remarks.
	Salt.	Cotton.	Sugar.	Without Rowhs.	In excess of Rowhs.	Difference between goods and specification of Rowhs.		For release.	For single or double duty.		For release.	For confiscation.	For single or double duty.		Confirmed.	Reversed.	Modified.		
Sirsa	175 17 12	.....	520 11 12	48	88	.....	136	...	...	.....	...	32	104	136	136	...	...	136	
Hansie	597 9 7	.....	127 39 6	146	23	4	173	4	...	4	...	28	141	169	168	...	1	169	
Delhi	1,492 10 11	.....	2,219 24 12	591	204	14	809	12	...	12	...	179	618	797	797	...	...	797	
Muttra	494 31 0	.....	290 1 10	146	70	1	217	3	...	3	...	89	125	214	214	...	...	214	
Agra	1,254 14 0	.....	779 32 7	191	279	32	502	14	...	14	...	152	336	488	484	...	4	488	
Jhansie	328 0 3	.....	204 9 0	328	71	7	406	4	3	7	...	241	158	399	396	...	3	399	
Saugor	1,408 38 9	.....	37 13 9	637	43	6	686	7	...	7	...	521	158	679	679	...	...	679	
Hoshungabad	292 33 2	.....	327 32 2	250	14	.....	244	...	...	.....	...	112	132	244	243	1	...	244	
Nagpore	3,033 5 8	.....	182 4 10	179	54	30	263	28	18	46	...	79	138	217*	202	...	2	204	* Out of these 13 cases are pending the Revenue Commissioner's decision.
Raipore	6,923 24 12	.....	.....	120	220	.....	340	1	...	1	...	162	177	339	335	1	3	339	
Berar	11 22 15	.....	.....	8	...	.....	8	...	...	.....	...	2	6	8†	...	...	...	...	† Pending the Revenue Commissioner's decision.
Total ...	16,012 7 5	.....	4,689 9 4	2,624	1,066	94	3,784	73	21	94	...	1,597	2,093	3,690	3,654	2	13	3,669	

Commissioner's Office;
Imperial Customs,
Agra, the 23*rd April* 1868.

ALLAN HUME,
Commissioner of Imperial Customs.

G.

Return showing the Number of Persons committed for smuggling under Section VII, Act XIV of 1843, *and the punishment awarded them during the year* 1867-68.

CUSTOMS HOUSES.	NUMBER OF SMUGGLERS.					PUNISHED WITH FINE AND IMPRISONMENT IN CASE OF NON-PAYMENT OF FINE.									PUNISHED WITH IMPRISONMENT.						REMARKS.
			CONVICTED.						IMPRISONMENT IN CASE OF NON-PAYMENT OF FINE.						WITH LABOUR.			WITHOUT LABOUR.			
									With Labour.			Without Labour.									
	Committed for trial.	Acquitted.	Head load Salt Smugglers.	Other Smugglers.	Total.	Number Fined.	Gross Fine.	Average Fine.	Number of Persons.	Gross Term.	Average Term.	Number of Persons.	Gross Term.	Average Term.	Number of Persons.	Gross Term.	Average Term.	Number of Persons.	Gross Term.	Average Term.	
							Rs. A. P.	Rs. A. P.		Y. M. D.	M. D. H.		Y. M. D.	M. D. H.		Y. M. D.	M. D. H.		Y. M. D.	M. D. H.	
Sirsa	9	2	1	6	7	7	270 0 0	38 9 1	7	1 9 0	3 0 0	...	...	...	...	...	...	...	...	...	
Hansie	10	1	5	4	9	9	237 0 0	26 5 4	8	1 3 0	1 26 6	...	...	...	...	...	...	1	0 1 0	1 0 0	
Delhi	69	7	58	4	62	49	323 0 0	6 9 5	2	0 5 0	2 15 0	9	1 6 0	2 0 0	...	...	...	2	0 2 0	1 0 0	
TOTAL ...	88	10	64	14	78	65	830 0 0	12 12 3	17	3 5 0	2 12 8	9	1 6 0	2 0 0	...	...	...	3	0 3 0	1 0 0	
Muttra	* 46	2	40	2	42	42	800 0 0	19 0 9	36	5 4 22	1 24 0	6	0 7 22	1 8 16	...	...	...	...	...	...	* No final orders have yet been communicated to this Office with regard to two of these smugglers.
Agra	93	10	80	3	83	(a)83	83 0 0	1 0 0	35	3 0 0	1 0 20	34	2 4 22	0 25 8	*2	0 2 0	1 0 0	...	...	...	(a) Thirteen were punished with fines only, and 1 with fine and imprisonment both. * These were imprisoned one month each more for assaults on Government servants.
Jhansie	†127	14	82	28	110	8	95 0 0	11 14 0	101	19 9 9	2 10 9½	1	0 0 11	0 11 0	...	...	...	...	...	...	† No final orders have been received with regard to three of these smugglers.
TOTAL ...	266	26	202	33	235	133	978 0 0	7 4 10	172	28 2 1	1 28 2	41	3 0 25	0 26 8	2	0 2 0	1 0 0	...	...	...	
Saugor	285	5	223	57	280	279	3,692 0 0	13 3 0	247	22 11 24	1 3 11	32	1 9 17	0 20 5	1	0 1 7	1 7 0	...	...	...	
Hoshungabad ...	107	3	66	38	104	‡104	1,393 0 0	13 4 5	95	6 8 18	0 25 6	5	0 2 22	0 16 9	...	...	...	...	...	...	‡ Four of these punished with fines only.
Nagpore	103	10	39	54	93	§ 93	1,536 0 0	16 8 3	55	4 8 18	1 0 13	36	2 0 9	0•20 6	...	...	...	...	...	...	§ Two of these punished with fines only.
Raipore	278	13	257	8	265	‖265	1,918 0 0	7 3 9	216	6 7 13	0 11 0	39	1 1 29	0 10 17	...	...	...	...	...	...	‖ Ten of these were punished with fine only.
TOTAL ...	773	31	585	157	742	741	8,539 0 0	11 8 4	613	41 0 13	0 24 2	112	5 2 17	0 16 18	1	0 1 7	1 7 0	...	...	...	
GRAND TOTAL ...	1,127	67	851	204	1,055	939	10,347 0 0	11 0 3	802	72 7 14	1 2 14	162	9 9 12	0 21 20	3	0 3 7	1 2 8	3	0 3 0	1 0 0	

COMMISSIONER'S OFFICE;
IMPERIAL CUSTOMS,
Agra, the 23*rd April* 1868.

ALLAN HUME,
Commissioner of Imperial Customs.

Comparative Statement of the Quantity of various kinds of Salt, imported across the entire line of Customs, during the Official years 1866-67 *and* 1867-68.

	1867-68.		1866-67.		Increase.		Decrease.	
	Quantity.	Duty.	Quantity.	Duty.	Quantity.	Duty.	Quantity.	Duty.
Sambhur	6,25,777 26 14	18,77,331 10 9	5,71,705 19 10½	17,15,117 3 10	54,072 7 3½	1,62,217 6 11	... ...	... ...
Balumbha	10,59,241 31 2	31,77,726 9 9	12,29,657 17 7	36,88,932 6 4	... ...	... ...	1,70,415 26 5	5,11,205 12 7
Salumbha	2,10,163 1 7⅓	6,31,389 3 2	97,997 32 9	2,93,986 6 0	1,12,465 8 14⅓	3,37,402 13 2	... ...	... ...
Sooltanpooree	7,33,695 18 14	22,01,086 7 2	6,97,769 33 4	20,93,307 9 4	35,925 25 10	1,07,778 13 10	... ...	... ...
Deedwana	3,04,291 14 10	9,12,874 2 5	2,75,789 3 1	8,27,367 10 8	28,502 11 9	85,506 7 9	... ...	... ...
Phullowdee	4,281 5 8	12,843 7 5	3,602 1 2	10,806 2 3	679 4 6	2,037 5 2	... ...	... ...
Kharee	1,768 8 9	5,158 8 0	1,922 5 0	5,642 10 4	... ...	... ...	153 36 7	481 2 4
Black	4,228 33 10	12,686 8 6	8,861 33 13	26,585 8 9	... ...	... ...	4,633 0 3	13,899 0 3
Kansia	2,41,454 12 12	7,24,365 13 0	2,46,488 26 15	7,39,468 4 4	... ...	... ...	5,034 14 3	15,102 7 4
Kansia, Sambhur, &c., mixed	1,712 29 2	5,138 3 7	1,886 21 7	5,659 10 10	... ...	... ...	173 32 5	521 7 3
Bhooskie	2,388 9 9	7,164 12 10	3,896 9 7	11,806 3 8	... ...	... ...	1,507 39 14	4,641 6 10
Kokan	3,61,523 20 10	5,42,286 0 8	2,32,846 17 0	3,49,271 0 0	1,28,677 3 10	1,93,015 0 8	... ...	... ...
Chooteea	25 7 12	75 10 0	84 18 8	253 7 7	... ...	... ...	59 10 12	177 13 7
Putchbuddra	75 20 0	226 8 0	311 29 10	935 3 7	... ...	... ...	236 9 10	708 11 7
Saindha	3 19 0	10 6 11	... ...	... ...	3 19 0	10 6 11	... ...	... ...
Russee Mittee	11 18 8	34 6 2	12 8 12	36 11 11	... ...	... ...	0 30 4	2 5 9
Salt in Saltpetre	28 24 10⅓	85 13 7	60 24 4	181 12 10	... ...	... ...	31 39 9⅓	95 15 3
Burragura	3,193 35 1	6,026 10 4	7,082 12 1	21,246 15 2	... ...	... ...	3,888 17 0	15,220 4 10
Mutteeah	0 7 12	0 9 4	0 23 0	1 11 7	... ...	... ...	0 15 4	1 2 3
Punwar or Bunwar	1,81,907 34 9	2,72,862 7 3	1,68,375 34 5	2,52,565 1 8	13,532 0 4	20,297 5 7	... ...	... ...
Pewasa	28 0 0	84 0 0	... ...	... ...	28 0 0	84 0 0	... ...	... ...
Lahoree	... ...	... ...	1 35 0	5 10 0	... ...	... ...	1 35 0	5 10 0
Total ...	37,36,100 20 4	103,89,460 14 10	35,48,353 6 3½	1,00,43,177 6 8	3,73,885 0 13	9,08,349 12 0	1,86,137 26 12½	5,62,066 3 10
	Deduct Decrease...				1,86,137 26 12½	5,62,066 3 10		
	Net Increase ...				1,87,747 14 0½	3,46,283 8 2		

Commissioner's Office;
Imperial Customs,
Agra, the 23rd April 1868.

ALLAN HUME,
Commissioner of Imperial Customs.

REPORT

GOVERNMENT
18
N.W.P.

ON

THE ADMINISTRATION

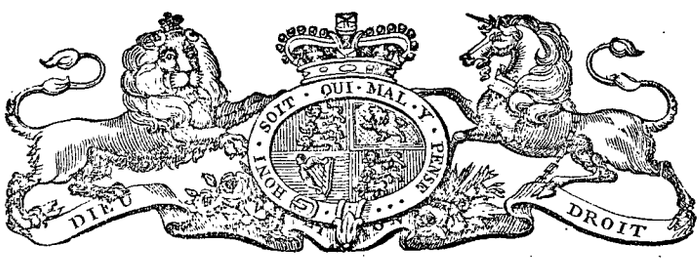
OF THE

Inland Customs Department,

FOR THE

OFFICIAL YEAR

1868-69.



ALLAHABAD:

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1869.

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REPORT ON THE ADMINISTRATION

OF THE

INLAND CUSTOMS DEPARTMENT

FOR THE

OFFICIAL YEAR 1868-69.

General Review.

INTRODUCTION.

THE leading features of our Departmental history for the past year may be sufficiently accurately sketched in very few words.

RESUMÉ OF THE PAST YEAR'S OPERATIONS.

2. During the first half of the year, unseasonable drought not only kept all lines of land-communication open and in good order, but, by depriving cattle and their owners of their customary agricultural employments, greatly stimulated the transport of merchandize, and notably that of salt. It resulted that by the 7th of October our Line realizations amounted for the first five months of 1868-69 to Rs. 55,35,012—a sum far exceeding that ever realized in any previous* corresponding period.

3. As the year progressed, the growing poverty of the people, the increasing scarcity of fodder and water, and the terrible mortality amongst cattle began, week by week, to make their effects on the salt trade more and more seriously felt. The excess collections (as compared with former corresponding periods) dwindled away, until we closed the year with only one-quarter of a lakh of maunds of salt in excess of the importations of the previous year.

4. Considering, however, all the adverse circumstances we had to contend with, as also the general depression of trade—due to the wide-spread scarcity that prevailed during so many months—this Department, so far as salt is concerned, must be held to have been excessively fortunate.

5. In the case of sugar, although the actual results were less favourable, we have equal, if not greater, reasons for congratulation.

6. After all, serious as even in our territories the dearth was, no very large proportion of our total salt-consumers were actually famine-striken; and even in the most afflicted districts, admirably organized relief systems prevented anything like a total stoppage of the consumption of salt, or other necessary articles of food. It was amongst our sugar-consumers—the people of Rajpootana†—that famine chiefly raged. Three-fourths of the population whose sugar-supply we tax (residents of Native States, whose rulers could do comparatively little to relieve their subjects), were involved in the calamity. On the other hand, the enormous exports of the previous year had nearly exhausted old stocks, while the supply of new sugars was most scanty,

* Gross Line realizations on salt and sugar only, exclusive of miscellaneous revenue.

From 1st April	to 7th October,	1868,	Rs.	55,35,012
Ditto	ditto	1867,	„	45,65,401
Ditto	ditto	1866,	„	49,76,742
Ditto	ditto	1865,	„	42,99,981
Ditto	ditto	1864,	„	48,64,825
Ditto	ditto	1863,	„	42,75,063
Ditto	ditto	1862,	„	39,32,594

† This may be partly estimated from the facts that between the 1st November, 1868, and the 27th March, 1869, nearly 9,000 emigrants crossed the Punjab Section of the Line into British territory, and five lakhs of maunds of grain were exported into Rajpootana; while between the 20th of January and the 27th of March, 1869, nearly 8,000 emigrants crossed the North-Western Provinces Section of the Line into our territories, and another five lakhs of maunds of grain were exported. There can be no doubt that from first to last fully 30,000 emigrants found their way from Rajpootana across the Punjab and North-Western Provinces' Sections of the Line, and that across these same sections some twenty lakhs of maunds of grain were exported. Unfortunately, we kept no record in the North-Western Provinces during the three and a-half months when emigration and the export of grain were both at their height.

partly owing to the failure throughout a wide extent of the crops, consequent on the drought, and partly to the extensive utilization of these latter as food for cattle.

7. Under these circumstances, an almost total paralysis of the sugar trade seemed inevitable; and it is at first sight* surprising that our exports fell short by only one-fourth† of those of the previous year, which had been the largest on record since the formation of the Department.

8. It resulted that, despite famine and all its attendant obstructions to trade—and where our exports were concerned, failure of supplies—our gross realizations in 1868-69 amounted to no less than 117¼ lakhs of rupees, being only (in round numbers) 3½ per cent. below those of 1867-68, and less than 8½ per cent. below those of the corresponding twelve months of 1866-67, the most successful epoch in the history of the Department.

9. With this brief *resumé* of the past year's operations, I proceed to a consideration of details.

THE INLAND CUSTOMS' LINE.

Minor rectifications have been effected, but no material change in its position has yet been made.

10. Since my last Report (for 1867-68) was submitted, no very material changes in the position of the Line have been made. In the Central Provinces, the gap at Nandgaon, noticed last year, has now been closed. Our terminus has been shifted from Sumasinga on the Ranchee Road, southwards some 60 miles to Joojoomera on the old Cuttack Road, thus both shortening our chain of posts and diverting further seawards (and rendering *pro tanto* less profitable) the illicit trade that rounds the eastern extremity of our Line. Several other minor rectifications, tending to strengthen our position, have also been effected; but, with these slight exceptions, the Inland Customs' Line as yet remains *in statu quo*.

An important change (the abolition of the Nagpore Loop Line) has been proposed.

11. Preparations have, however, been made for an important change. At present we have Loop Lines running from Boorhanpore to Chanda, the one (267 miles in length) along the southern frontier of the Central Provinces, forming a portion of the Imperial Line, the other (315 miles in length) dividing the Berars from the Nizam's territory, the realizations of which pertain to Hyderabad. The maintenance of these double Lines beyond the currency of the present year appearing unnecessary, detailed proposals have been submitted to the Chief Commissioner, Central Provinces, and to the Resident of Hyderabad, for the abolition of this portion of the Central Provinces' Line at the close of the current year, and the re-organization of the Berar Line on a somewhat more economical scale than that now sanctioned. Should these proposals be approved, the present Berar Line will next year be incorporated in the Inland Customs' Line, and half its entire cost thereafter charged to the Berars and the Central Provinces respectively.

SUPPLY OF SALT TO THE COUNTRY IN REAR OF THE LINE.

Sources of supply remained unchanged;

12. The various salt-sources which supply the population in rear of our Line with taxed and untaxed salt, were last year enumerated and discussed,‡ and since then no new sources have been opened to us.

but additional information has been obtained in regard to the untaxed salt consumed within the Line.

13. In regard to the duty-paying salt, nothing need be added to what was then put on record; but, in regard to salt which escapes taxation, some additional information has been obtained.

Illicit manufacture in Behar *enquired into.*

14. Under the orders of the Bengal Government, a careful enquiry into the illicit manufacture of salt in Behar was made by two officers§ of this Department. Circumstances (fully reported on to the Bengal Government) prevented this enquiry

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* See, further, paras. 61, 62.

† Total quantity of sugar exported across the Inland Customs' Line in 1868-69, Mds. 18,16,023
Ditto ditto ditto 1867-68, „ 24,60,346
Ditto ditto corresponding 12 months of 1866-67, „ 22,60,938
Ditto ditto ditto 1865-66, „ 24,04,187
Ditto ditto ditto 1864-65, „ 21,89,787

‡ In Appendix C. will be found a note by Captain Repton on the manufacture of Dobra, or Chota Kansia Salt, at Ramsur and other places in the neighbourhood of Ajmere (of which I was unable to furnish any account last year).

§ R. M. Adam, Esq., and R. J. Whitten, Esq.

being quite so complete as it might have been, but sufficient was elicited to render it in my opinion certain that even in the present depressed* state of the saltpetre trade, fully three lakhs of maunds of untaxed salt find their way into the market from the Behar factories, thereby entailing a loss of nine and three-quarters lakhs of rupees per annum on the State.

An outturn of fully three lakhs of maunds ascertained.

15. The whole matter has been laid before the Government of Bengal, and the introduction of a preventive system (similar to that in force throughout Oudh and the North-Western Provinces), at a cost of one and a-quarter lakhs of rupees per annum, recommended.

Matter reported on, and proposals submitted to the Bengal Government.

16. The manufacture of salt in Rewah, and the introduction of this salt, untaxed, into our territories, formed under the orders of the Government, North-Western Provinces, the subjects of careful local enquiry by another† of our officers. It appears that owing to our failure to check this import we are losing a lakh of rupees at least annually. The papers have been submitted to His Honor the Lieutenant-Governor, and the establishment tentatively for three years of a short preventive Line, at a cost of Rs. 35,000 per annum, recommended.

Import of untaxed salt from Rewah *enquired into,*

and reported on to the Government of the N.-W. P.

17. The alleged illicit manufacture of salt in Rampore (Rohilkund) was also investigated‡ under the orders of the Government, North-Western Provinces. The entire absence of saliferous soils in Rampore has been apparently established, and the total annual outturn of the very few saltpetre works that exist in the Nawab's territories ascertained, according to Mr. Bradford, to fall short of 500 maunds.

Illicit manufacture in Rampore

enquired into, and proved to be trifling.

18. A certain amount of salt, it was last year remarked, was still illicitly manufactured within our own territories in the North-Western Provinces and Oudh, notwithstanding the vigilance of the Internal Branch of the Department. Small as is the proportion which the salt now produced bears to the quantity formerly so made before the creation of the Internal Department, hopes may now be entertained of diminishing still further illicit manufacture within these Provinces.

Illicit manufacture in the N.-W. P. and Oudh

may probably be still further checked by the licensing of local salt works.

19. In accordance with the suggestions of the Honorable Mr. J. Strachey, the more important salt-fields of the North-Western Provinces and Oudh have been carefully examined and considered, with the view to legalizing the production of salt at the richest of these. One great salt-marsh in Jounpore (North-Western Provinces), and several small tracts in Roy Bareilly, Oonao, and Pertabgurh (Oudh), appear to afford prospects of remunerative duty-paying manufacture; and detailed proposals in regard to the former, and drafts of a short act and of a complete code of rules for the legalization and management of such works, the realization of the Government duty on their produce, &c., have been submitted to the Governments of Oudh and the North-Western Provinces.§

The more important salt-fields of the N.-W. Provinces and Oudh have been examined.

Certain small tracts in Roy Bareilly, Oonao, and Pertabgurh, and a large salt-marsh in Jounpore, seem to afford reasonable prospects of remunerative manufacture.

Detailed proposals submitted to the N.-W. Provinces and Oudh Administrations.

20. That untaxed Mundi salt finds its way into our territory to a considerable amount, seems to admit of but little doubt.‖ Under the orders of the Punjab Government, I myself purport visting the mines in the height of the working season, and in

Mundi Salt.
Enquiries sanctioned and to be made during the current year.

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* Of course in the event of any revival of the Behar saltpetre trade the loss to Government would be much greater. The manufacture of salt increases very nearly in proportion to that of saltpetre, and in North Behar it would not be an exaggeration to say that for every maund of refined saltpetre exported a maund of illicitly-made salt finds its way into consumption.

It was a pregnant remark of one of the Steam Flotilla Company's Agents at Revelgunge, that whenever the saltpetre trade downwards was dull, the salt trade upwards grew brisk, but, that as the saltpetre exports revived, salt imports fell off. He had no idea of the cause, but merely stated the fact as a curious matter of personal observation.

† T. B. Ray, Esq.

‡ By G. A. Bradford, Esq., Deputy Inspector.

§ The re-opening of local works in Oudh and the North-Western Provinces has been sanctioned, with the triple object of saving to the populations of these Provinces the cost of carriage from distant sources, of encouraging an important manufacture in our own territory, now almost monopolized by the subjects of Native States, and of rendering our supplies of this prime necessary of life as far as possible independent of any action on the part of the rulers of these latter.

‖ According to the price-currents of the Revenue authorities, Mundi salt averaged during the past year 19 seers 13 chittacks for the rupee at Noorpore (Kangra), 16 seers at Hoshiarpore, 20 seers 4 chittacks at Onalia (Hoshiarpore), and 14 seers 6 chittacks at Simlah. At such prices, inferior as it is, it must form the staple of consumption of the lower-classes.

the meantime the local district officials are collecting for me the statistics necessary to a right estimation of the loss now entailed on us. By treaty we possess the right to regulate the sale of salt at these mines, and by the close of the current official year we shall, I believe, be in a position to adopt proper measures for the adequate protection of our revenue.

Manufacture of earth-salt in Puttiala, &c.

21. In regard to the manufacture of earth-salt in Puttiala, Jheendh, and other Native States within the Punjab, no reliable facts can be obtained without careful local enquiry. Some officers estimate the outturn at lakhs, others at only thousands, of maunds. The Government of the Punjab have been solicited to authorize the necessary enquiry, and arrange for the same with the various Native Chiefs.

The sanction of the Punjab Government to a careful local enquiry has been solicited.

Influx of half-taxed salt round our Eastern terminus

continues unabated.

22. The influx of untaxed and half-taxed salt (it is impossible to say in what proportions) round the Eastern terminus of our Line, through Kolagurh, Sonepore, Bôd, Duspulla, Rampore (also called Rarakhol), Ingol, Nursingpore, &c., continues unabated. During the past year, the notorious smuggling community of Nagar Kantah appear to have been in some way punished by the Commissioner of Cuttack, but, though they no longer store salt, their illicit trade continues *in statu quo*. The Bôd Rajah seems to have prohibited the sale of Ganjam salt within his territories, and to have given a contract to some men to sell Cuttack salt there; but all the salt purchased from retail dealers within his territory and that of Duspulla, by the officer who was secretly deputed to enquire into this illicit trade, was from Ganjam, and thousands of bullocks laden with this salt travel northwards unquestioned through these States. The Duspulla Rajah, in June, detained, it is said, *one* despatch of 100 cart-loads of Madras salt, and refused to allow its northward passage; but, though under greater precautions, salt on bullocks and (by some routes) carts still finds its way in undiminished quantities from the Madras Presidency, and striking the new Kuttak (Cuttack) Road at Sonepore, Bôd, Bhutgaon, Bhailpoora, Gooneea, Sona Kunhyan, and other places, finds its way north by Peekreegurh and Ungol, by Poornagurh, Kudleegurh, Rarakhol, and Sarpalee, and numerous other routes, to Bamra, whence it finds its way to Ranchee, Ruttunpore, and even Sumbulpore.

This traffic known to be in contravention of the wishes of the British Government;

23. This traffic is known to be in contravention of the wishes of the British Government; and, what with the stir made by the Cuttack authorities, under whom most of these Native States are, and our attempts to prevent the Sumbulpore traders getting in the half-duty salt by circuitous routes (which they steadily continue to do), every one concerned in this trade is now greatly on their guard; and it has only been by sending down a Native Officer, in the character of a private traveller, that we have been able to obtain any reliable information. By Rampore alone, where a 2-annas' grazing-tax is taken as they pass, between 6,000 and 7,000 bullocks—of which about 2,000 only were loaded with cocoanuts and turmeric, and the rest with salt—have passed this year, coming through Poornagurh and Kudleegurh.

hence it is very difficult to obtain a correct estimate of its extent.

By one single bullock-track, at least 10,000 maunds evaded duty; this, however, is not believed to be one tithe *of what yearly goes northward.*

24. By this single bullock-track, therefore—for it is little more—at least 10,000 maunds have evaded our duties. Judging from the imperfect information that we possess, not a *tithe* of the salt that goes northward travels by this route, and I am of opinion that no effectual check will ever be put to this illicit traffic until we bring the terminus of the Central Provinces Line down to Sonepore, and thence run a Bengal Line down the new Cuttack Road (along which food and water is procurable), to somewhere near Bankeegurh, and thence cut across to the sea coast, which our Line should touch just north of the Chilka lake.

The only remedy appears to be the continuation of the Line to the coast.

Proposals submitted D.-O. to His Honor the Lieutenant-Governor of Bengal.

25. I have demi-officially submitted this question for the consideration of His Honor the Lieutenant-Governor of Bengal, with a detail of the establishment that would be required. The total cost of a throughly-efficient Line would not even at first exceed one* lakh of rupees per annum, and would, as time went on, be susceptible of considerable reduction.

* A light Line could be laid down for Rs. 65,000 per annum.

Thibet salt.

26. In regard to the import of untaxed Thibet salt, I regret that no accurate data are available; it seems probable that a population of not less than four, and not more than five, lakhs in Kumaon, Gurhwal, &c., consume this salt. About one and a half lakhs of revenue are probably thus sacrificed, but this, from the nature of the country permeated by the trade, seems unavoidable, and even if we *could* succeed in taxing or barring the ingress of this salt, it may be doubtful whether political considerations would allow of our checking this feeble Trans-Himalayan commerce.

Difficult to tax it or bar its entry.

Even if possible it might probably be deemed impolitic.

27. Altogether from one source or another, it would appear* that about 4,52,782 tons of taxed, and 31,516 tons of untaxed salt—in all 4,84,298 tons—found their way into the consumption of the population in rear of our Line in 1868-69.

Total supplies from all sources.

* TABLE SHOWING THE AMOUNT OF SALT CONSUMED BY THE POPULATION IN REAR OF THE INLAND CUSTOM'S LINE.

WHENCE DERIVED.	IN 1868-69.		IN 1867-68.	
(1) TAXED.	Maunds.	Tons.	Maunds.	Tons.
Punjab Mines, ...	12,60,193	46,293	11,96,440	43,951
Imported across the Customs' Line, ...	37,67,143	1,38,382	37,53,366	1,37,879
(2) Paid duty to Internal Department, ...	14,537	534	14,674	539
Imported or manufactured in Bengal, ...	72,83,929	2,67,573	75,26,245	2,76,474
Total Taxed, ...	1,23,25,802	4,52,782	1,24,90,725	4,58,843
(3) UNTAXED.				
Illicitly manufactured in Behar, ...	3,00,000	11,020	3,00,000	11,020
Ditto in Oudh and North-Western Provinces, ...	1,00,000	3,673	1,00,000	3,673
Imported from Rewah, ...	33,000	1,212	33,000	1,212
Ditto Thibet, ...	50,000	1,836	50,000	1,836
Ditto Mundi, ...	30,000	1,102	20,000	735
Imported through Sonepore and the tributary mehals,	1,20,000	4,408	1,00,000	3,673
Manufactured in Puttiala, Jheendh, Nabha, &c., ...	25,000	919	25,000	919
Smuggled in the Punjab, across the Line, and in Bengal	2,00,000	7,346	2,00,000	7,346
Total Untaxed, ...	8,58,000	31,516	8,28,000	30,414
Grand Total, ...	1,31,83,802	4,84,298	1,33,18,725	4,89,257

(1) Under this head I include only the produce of the four mines of Khewra, Surdee, Wurcha, and Kalabagh, collectively known as the Shahpore mines, all of which are situated in the salt-range lying between Pind Dadun Khan on the Jhelum, and Kalabagh on the Indus. The produce of five Kohat mines (*viz.*, Jutta, Malgeen, Murree, Khurruck, Bahadur Kheyl) amounting altogether in 1868-69 to 4,02,777 maunds, has been excluded, I possessing no information as to the proportions in which this salt is consumed in foreign territories and in our own territories Trans-Indus.

The Shahpore salt pays full duty Rs. 3, but that of the Kohat mines pays from the three first named 4 annas, from the fourth 3 annas, and from the Bahadur Kheyl mine only 2 annas a maund.

The Kohat duty has heretofore been maintained at this low rate from political considerations; and to prevent the entry of this low-dutied salt into our Cis-Indus territories, the Indus preventive Line is kept up. The comparative importance of these several mines may be gathered from the subjoined detail of their outturn in 1868-69.

	Maunds.	Tons.
Jutta, ...	1,12,768	4,142
Malgeen, ...	83,416	3,063
Murree, ...	35,793	1,315
Khurruck, ...	50,224	1,844
Bahadur Kheyl, ...	1,20,576	4,429
Total, ...	4,02,777	14,793

(2) Under this head are only shown the quantities that actually passed into the market, without reference to salt imported, manufactured, or held in stock in *bond*. During the past year the stocks of *Government* salt have nearly been exhausted: only 2,48,473 maunds of this were sold in 1868-69, against 14,88,912 maunds in 1867-68. Year by year, as the Government sales have diminished, the sea-imports have increased, as will be seen from the subjoined table compiled from the valuable monthly reports of Calcutta imports, most kindly supplied to me by Messrs. Ernsthausen and Oesterley:—

Year in which imported.	Liverpool.	Bombay, Kurachee.	Madras.	Jeddah.	Muscat.	Ceylon.	French.	Total.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
1865-66, ...	34,12,992	4,05,918	5,35,397	3,72,216	1,06,910	66,876	79,633	49,79,942
1866-67, ...	35,31,515	6,79,687	2,50,776	5,22,467	1,01,757	31,609	53,690	51,71,501
1867-68, ...	57,03,395	2,62,931	6,14,844	4,34,550	1,86,258	1,00,090	1,04,162	68,52,870
1868-69, ...	64,48,309	7,04,433	99,420	3,26,273	1,53,970	38,870	55,319	78,26,597

It will be observed that it is almost exclusively the Cheshire trade that has profited by the discontinuance of Government manufacture in Bengal. Of course *deliveries*, *i. e.*, sales from bond, by no means correspond with imports; the former depend primarily on prices, the latter on freights. In Appendix D. will be found an interesting table of the *deliveries* of Liverpool salt in Calcutta monthly, with range of prices, for the last seven years, which I also owe to Messrs. Ernsthausen and Oesterley.

(3) From the nature of the case, we can only approximately state the quantities under this head. Those now given are what I now believe to be closest to the real facts.

INTRODUCTION.

Indicate a consumption of 9lbs. 7oz. per head of the whole intra-Line population.

28. This was some 5,000 tons, or rather more than one per cent., less than in the preceding year* and indicates a consumption† of only 9lbs. 6·94oz. per head of the total‡ intra-Line§ population in 1868-69, against 9lbs. 8·48oz. in 1867-68.

Diminution in consumption in past as compared with preceding year probably due to the general scarcity.

29. This diminution I do not hesitate to ascribe to the high prices and positive distress, which in milder or more aggravated forms long prevailed amongst a certain proportion of our salt-consumers. Not only were the people suffering more or less severely from actual want in many places, but throughout the country in rear of the Jhansie, Saugor, and Hoshungabad Divisions (dependent for their imports on Bunjara traffic, rendered last year impracticable by dearth of fodder and water) the price of salt for many months was high beyond precedent.

This diminution trifling when treated as spread over the whole population, but more serious when considered as due to a decrease in the consumption of less than one-eleventh of the people.

30. Viewed as a decrease of only 1½oz. per head of the whole population, the matter is doubtless insignificant, but in reality, according to the information that I possess, barely ten millions of the population of the Punjab, the North-Western Provinces, and Central Provinces, and Independent Bundelkund, were directly affected by the drought; and even allowing one-third of the decrease to be due to the general effects of high prices throughout Upper and Central India, the figures above quoted would lead us to infer a curtailment of fully ¾lb., or one-twelfth of the already very moderate salt-consumption of some ten millions of people.

Bengal so differently circumstanced to Upper and Central India, that its consumption and population must be eliminated from the calculations, if a correct idea of the consumption of our own Provinces is required.

31. Is this, however, after all, quite a fair method of treating consumption? May we justly assume that the consumption of Upper and Central India, with which we are chiefly concerned, really averaged the 9lbs. 7oz. deduced above? The conclusions‖ that I have arrived at as to the differences in consumption due to differences in diet and climate lead me to doubt this. The people of Bengal as a body are rice and vegetable-consumers, who eat twice a-day, and the climate is a humid one; moreover, we have as yet no certain knowledge of what the population of Bengal really is, while the lower-classes seem as a body better off than our up-country ryots. To obtain, therefore, any fair approximation to the consumption of those Provinces in which this Department is specially interested, we must, if possible, eliminate Bengal from our calculations. It is not feasible to do this with sufficient accuracy to compare the actual consumption of these Provinces during the past and preceding years, but it *can* be done sufficiently accurately to afford a fair general idea of what this habitually is under existing arrangements.

Eliminating Bengal, the consumption is about 7lbs. per head.

32. It would appear¶ that a population of sixty-eight millions consumed 2,11,351 tons, which gives us an average consumption for the populations of the Punjab, Oudh, the North-West and Central Provinces, of 6·96, or say 7lbs., per head.

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* I note that in my last year's Report I overstated the Bengal supplies, and also, I now believe, to a slight extent the untaxed supplies. The figures given in the note to the preceding paragraph are as correct as our present information renders possible. The taxed supplies, at any rate, are now absolutely accurately stated for both years.

† I find that amongst those best qualified to judge, the opinion is that I last year somewhat overstated the intra-Line population, which they would state at 115 millions, thus—Bengal, 47; North-Western Provinces, 30; Punjab (portion inside Line), 14; Oudh, 9; Central Provinces (portion inside Line), 7; Independent Bundelkund, Rampore, Puttiala, &c., 8. It is on this basis that I have, therefore, now calculated consumption.

‡ For consumption see, further, paragraphs 105-114.

§ I had hoped to present a complete table of the extra-Line consumption also, but I have been unable to obtain the necessary materials. Much useful information as to MYSORE, and some in regard to THE NIZAM'S TERRITORIES and BOMBAY will be found in Appendix G.

‖ Vide conclusion II. paragraph 114.

¶ The population (excluding Bengal) may be assumed at sixty-eight millions. The supplies—from the mines—crossing the Line; paying duty in the Internal Department; illicitly made in Oudh and the North-Western Provinces; imported from Rewah, Thibet, and Mundi; and manufactured in Puttiala, Jheendh, &c., may remain unaltered. Of the amount imported through Sonepore and the tributary mehals, we will assume 2,400 tons as actually consumed in the Central Provinces. The total amount of smuggled salt that, either across the Line or from the mines, finds its way into the consumption of the sixty-eight millions, we will take at 5,000 tons. There remain the Eastern salts, which are consumed in the Benares, Goruckpore, and Fyzabad Divisions. It is impossible to state accurately the amount of this, but we are certainly overstating it, as trade now is, at 10,000 tons, which admits of three millions of the people consuming 8lbs. a head. It will be observed that the more important items in the above (giving a total of 2,11,351 tons) are certainties; that it is in the minor items only that error can well exist, and that these I have certainly, if anything, over estimated.

33. But this is supposing the whole of the salt to be consumed by the people themselves, and none to be given to cattle; whereas *some*, though not much, is certainly so given. We have no accurate census of the cattle of *all* these Provinces yet, but the Punjab and Central Provinces' returns show that on the average there is one head of horned cattle, horses, ponies, and camels, to two heads of the population; rejecting donkeys, goats, and sheep, which (except when the latter are kept by or for Europeans) scarcely ever get salt, we cannot err greatly in assuming thirty-four millions head of cattle, &c., to the sixty-eight millions of people. Of these thirty-four millions, fully three-fourths never get salt, except a chittack or at most two at the "Dewallee;" and if we allot 2lbs. each to the remaining one-fourth, we shall, so far as our present information goes, fully cover the expenditure of salt for cattle. Deducting this, the consumption remains 6¾lbs. per head of the population.

But making allowance for the consumption of cattle we shall only have about 6¾lbs. per head.

34. The latest census of the North-West Provinces, which was most carefully taken, shows that in round numbers one-third (more exactly $\frac{107}{301}$) of the population consists of children below the age of twelve years. Of such children, widely-extended enquiries (*vide* Appendix A.) show the consumption to average half that of adults. We deduce, therefore, as the actual average consumption in the Provinces with which we are concerned—adults, 8·1lbs. per head, and children below the age of 12, 4·1lbs. per head per annum. Curiously enough, this is as nearly as may be the general average consumption which we obtained from a multitude of independent local enquiries.

Making allowance for the difference in the consumption of children and adults, and the relative numbers of both, we deduce a consumption of 8lbs. per adult and 4lbs. for children; and this is also the average consumption deduced from local enquiries.

35. It has been already noticed that the gross realizations of this Department as a whole, amounted in 1868-69 to 117¼ lakhs; of this total, the Internal* Department contributed about one lakh.

FINANCIAL RESULTS.
GROSS REALIZATIONS.

36. The Line yielded† in round numbers 104½ lakhs on salt, rather more than 11¼ lakhs on sugar, besides half a lakh of miscellaneous receipts, fines, forfeitures, license-tax, unclaimed deposits, and the like.

LINE.

37. The salt revenue exceeded (but by less than one-half per cent.) that of the preceding year; fell short of that of the corresponding period of 1866-67 by 7 per cent.; exceeded that of 1865-66 by over 8 per cent.; and of all previous years by still larger percentages. So far, therefore, as salt is concerned, the past ranks as the second most successful year in *our* annals.

SALT.

Realizations exceeded those of preceding year.

38. This at first sight—due consideration being had to the general depression of trade, the wide extent over which scarcity prevailed, and the excessive dearness of salt throughout considerable tracts—may seem inexplicable. When, however, we look

This only explicable when the *total* realizations of the country isolated by the Line are considered.

* GROSS REALIZATIONS OF THE INLAND CUSTOMS DEPARTMENT.

Year	Line.	Internal.	Total.
	Rs.	Rs.	Rs.
1868-69, ...	1,16,32,888	92,887	1,17,25,775
1867-68, ...	1,20,67,632	1,00,225	1,21,67,857
Corresponding 12 months, 1866-67, ...	1,26,85,574	1,15,618	1,28,01,192
Ditto ditto 1865-66, ...	1,11,94,713	1,37,076	1,13,31,789

† DETAILS OF LINE COLLECTIONS.

Year.	Salt.	Sugar.	Miscellaneous.	Total.
	Rs.	Rs.	Rs.	Rs.
1868-69, ...	1,04,40,262	11,34,210	58,416	1,16,32,888
1867-68, ...	1,03,93,543	16,23,453	50,636	1,20,67,632
Corresponding 12 months, 1866-67,	1,12,28,154	14,17,808	39,608	1,26,85,570
Ditto ditto 1865-66,	96,49,582	15,08,032	37,099	1,11,94,713

to the total* revenue realized on account of the whole area which our Line virtually isolates, we find sufficiently clear traces of the crisis through which we have been passing.

The debatable land.

39. There is a wide debatable land, comprising large portions of the Benares, Patna, and Fyzabad Divisions, and of the Nepaul Terai, lying as it were between the strongholds of the Eastern and Western salts, and more or less occupied by one or other of these according to fluctuations of price, season, and the like.

More Western and less Eastern salt imported into this neutral territory during the past than the preceding year.

40. Last year (1867-68), our Line revenue was somewhat below what it should have been, owing to the unusual predominance of Eastern salts in this neutral territory. This year, the very considerable deficit we should otherwise undoubtedly have had to exhibit has been converted into a small surplus by our Western salts more than regaining their lost ground in the debatable land.

The Punjab mines, as as well as the Line, show an increase;

41. Notwithstanding the very prevalent distress (which must have restricted individual consumption there, as elsewhere), the Punjab mines show a considerably increased outturn, a fact for which we were prepared, as we were aware that during the year the area of consumption of rock-salt was widening, and simultaneously, of course, that of our Punjab Divisions—Rajpootana imports contracting.

but Bengal shows a decrease.

42. But to balance the increased outturn from the mines (maunds 63,753) and the Upper Indian decrease in consumption, consequent on high prices and general scarcity, we sent† down from two to two and a half lakhs of maunds more of Western salts into the debatable land, and thus, while our own realizations remained unaffected, reduced those of Bengal by from six to eight lakhs of rupees; and, as a matter of fact, the total Bengal deliveries of 1868-69 only fell short of those of 1867-68 by about two and a half lakhs of maunds—a large proportion of the unaccounted-for deficit in their realizations being due to the fact that in the latter year they sold nearly fifteen lakhs of maunds of Government salt, on which they realized the price of the salt as *well* as duty, while in the former less than two and a half lakhs of this were disposed of.

Causes which led to more Western and less Eastern salt finding its way into the debatable land in 1868-69 than in 1867-68.

43. The question now remains, why did more Western salts go down and less Eastern come up in 1868-69 than in the preceding year? In 1866-67 the price of Liverpool salt in bond in Calcutta ranged from Rs. 97 to Rs. 130 per 100 maunds. In 1867-68 prices ranged from Rs. 87 to Rs. 126, and it was therefore quite reasonable that, as actually happened, more Eastern salts came up in the latter than in the former year. But in 1868-69, prices ranged only from Rs. 72 to Rs. 111! Nay more, by reference to Appendix D. it will be seen that in each single month of this latter year salt was cheaper than in the corresponding month of 1867-68. How, then, did it happen that the upward movement of Eastern salts was checked and restricted in the year under report, instead of, as we should have expected, being greatly stimulated?

* TOTAL SALT REVENUE REALIZED ON ACCOUNT OF THE WHOLE AREA VIRTUALLY ISOLATED BY THE LINE.

Department.	1868-69.	1867-68.	Corresponding 12 months of 1866-67.	Corresponding 12 months of 1865-66.
	Rs.	Rs.	Rs.	Rs.
Bengal, ...	2,40,07,676	2,68,85,000	2,61,62,168	2,42,00,000
Punjab, ...	37,80,581	35,90,000	39,45,000	33,45,000
Line, ...	1,04,40,262	1,03,93,543	1,12,28,154	96,50,000
Total, ...	3,82,28,519	4,08,68,543	4,13,35,322	3,71,95,000

† Our railway returns for 1867-68 are not quite complete, but it would seem that Agra, Delhi, and Hattras sent down about 10¼ lakhs of maunds by rail in 1868-69, against apparently some 8 lakhs in the previous year. Besides this, large numbers of boats that had come up laden with grain went down with salt. But then, both of river and rail-borne salt a great deal was absorbed by the country between Jubbulpore and the Jhansie, Saugor, and Hoshungabad Divisions of the Line, as will be more particularly noticed elsewhere.

44. The real explanation of this apparent anomaly is to be found in the peculiarities of the season and its results. The drought of the first six months brought (as has already been noticed) large stores,* at unusually cheap rates, into our great Upper Indian marts. Then began the abnormal upward and westward movement of grain; even so low down as Patna, our officers (who were enquiring into the illicit manufacture in Behar) found the import trade in rice extraordinarily active. Capital commonly employed in bringing up salt was more profitably utilized in importing grain; and the cheap salt, so abundant at the very marts to which so much of the grain went, was eagerly taken up as a return investment, and, in the case of river traffic especially, as a return freight.

45. No new kinds of salt have been imported across the Line during the past year, but some changes (the causes of which are patent and easily explained) have taken place in the relative proportions in which the various descriptions have been received.

No new kinds of salt have crossed the Line, but changes are noticeable in the proportions in which the different kinds have been imported.

46. Balumbha or Bhurtpore salt shows † an increase of more than a lakh of maunds. The season was a peculiarly favourable one for manufacture,‡ and the proximity of the works to the marts of Agra and Muttra (with which they are connected by roads, which during the long drought were in very fair order), the low rates of carriage which prevailed during the first half of the year (consequent on the suspension of agricultural operations), and the fact that fodder though dear, and water though scarce, were both *procurable* on the routes it had to travel, greatly encouraged the trade in this salt.

Balumbha, or Bhurtpore salt.

* How unusually large the supplies poured in during this first six months were, may be judged by comparing our salt collections for that period with those of similar corresponding ones:—

	For the 1st Half-year of—		
	1868-69.	1867-68.	1866-67.
	Rs.	Rs.	Rs.
Salt Collections, ...	46,95,493	38,28,028.	40,58,180

† Actual Imports.

Detail in Maunds of the various Descriptions of Salt actually Crossing the Inland Customs' Line.

Year.	Balumbha or Bhurtpore.	Sooltanpoorie.	Sambhur.	Bombay, or Kokan.	Deedwana.	Puchbuddra or Kansia.	Salumbha.	Madras, or Bunwar.	Other Salts.	Total.
1868-69, ...	11,70,552	7,13,225	5,79,426	4,32,454	2,92,630	1,67,805	2,59,620	1,29,632	21,800	37,67,143
1867-68, ...	10,61,793	7,31,512	6,00,166	3,83,092	3,03,406	2,48,214	2,09,008	1,99,022	17,155	73,53,366
Corresponding 12 months of 1866-67, ...	13,34,309	7,82,854	6,33,986	2,86,173	3,04,987	2,69,414	1,13,845	1,94,711	34,582	39,50,862
Ditto 1865-66,	11,97,756	5,71,968	5,51,966	2,83,706	3,28,190	2,62,294	89,742	1,07,217	42,002	34,34,842

The figures given above differ of course from those representing the amounts on which duty was *paid* in each year (which are subjoined). In the first place, salt is *not* always brought to the scale of the same description as is paid for; secondly, some passes, though paid for, are never utilized; thirdly, some passes paid for in each year are not utilized until the next.

Nominal Imports.

Detail in Maunds of the various Descriptions of Salt on which Duty was Paid in the various Customs-houses of the Inland Customs' Line.

Year.	Balumbha or Bhurtpore.	Sooltanpoorie.	Sambhur.	Bombay, or Kokan.	Deedwana.	Puchbuddra or Kansia.	Salumbha.	Madras, or Bunwar.	Other Salts.	Total.
1868-69, ...	11,74,317	7,07,329	6,06,298	4,45,520	2,93,532	1,47,304	2,47,549	1,32,184	16,304	37,70,337
1867-68, ...	10,59,242	7,33,695	6,25,778	3,64,245	3,04,291	2,41,531	2,10,463	1,81,908	17,669	37,38,822
Corresponding 12 months of 1866-67, ...	13,35,018	7,90,726	6,39,458	2,81,533	3,08,725	2,75,773	1,12,328	2,11,090	34,376	39,89,027
Do. 1865-66,	11,92,412	5,65,658	5,65,540	2,82,732	3,21,928	2,67,475	85,677	71,810	42,594	33,95,826

‡ In Sumbut 1923, which nearly corresponds with the official year 1867-68, only 11,42,922 maunds were manufactured; while in Sumbut 1924, which nearly corresponds with 1868-69, the outturn was 12,32,739 maunds.

FINANCIAL RESULTS.

Sooltanpore salt.

47. In Sooltanpore* salt there has been a slight decrease. Here, too, the manufacture had been most successful,† and dry weather and cheap carriage gave all necessary encouragement, but the unprecedently heavy sales of the two preceding years (in one of which manufacture had, owing to continuous wet weather, been comparatively a failure) had altogether exhausted old stocks; and thus, although the demand continued brisk, no more salt could be sent into market than what was actually sold. The small stock in hand (about half a lakh of maunds) when the year closed being sweepings and refuse, or new wet produce, unfit‡ for sale.

Sambhur salt.

48. In Sambhur,§ also, there is on the whole a decrease. During the early part of the year, the drought, as in other cases, tended to stimulate the import of this salt along lines not absolutely closed to traffic, and hence both the Delhi and Agra Divisions show an increase in this staple. But the Bunjara trade southwards was barred by wide, fodderless and waterless tracts, and the import of Sambhur in the Jhansie Division (where this salt has heretofore been the only one used) fell off by nearly one-half, more than counterbalancing the increase obtained elsewhere.

Bombay-coast, or Kokan salt.

49. Kokan,§ whose steadily-growing trade has made a vast stride during the past year, owes its success partly to the development of railway communications, and the increasing favour in which, as a cheap and good salt, it is becoming held by the people of the Central Provinces (to whom it has only of late years become available), and partly to special circumstances. Hitherto, the country in rear of the Saugor and Hoshungabad Divisions has been chiefly supplied with Kansia (or, as it should be called, Puchbuddra) salt, imported on bullocks by Bunjaras direct from the works. During the past year, the imports of this salt, owing to the scarcity of fodder and the mortality amongst the traders' cattle, fell off by one-third, and Kokan, now brought by rail to a station 20 miles north of Khundwa, filled up to a considerable extent the vacuum thus caused. On the other hand, the Chutteesgurh Division, in rear of our Raipore Line, has in former times derived its supplies exclusively from the Madras coast. This year, though ample stocks were brought up to depôts *near* the Line, the Bunjaras who owned them refused for many months to bring them across the Line, under some mistaken idea that this was about to be abolished. Prices of course rose inside the Line, and Kokan,‖ rail-carried to Nagpore, was pushed on to meet the demand.

Deedwana salt.

50. In Deedwana the decrease is trifling, and is due partly to the onward movement of rock-salt, and partly to emigration and restricted consumption amongst the people in rear of the Hansie Line, where alone in our territories this salt is consumed.

Puchbuddra or Kansia salt.

51. Of the decrease in Puchbuddra enough has already been said when dealing with Kokan. Bunjaras' bullocks are the only means of conveyance for this beautiful salt—the finest produced in India—and bullocks cannot make their way across vast tracts devoid, as they this year were, of herbage and water.

Salumbha or Noh salt.

52. Our own works at Noh profited greatly by the stoppage of Bunjara traffic. Manufacture had been peculiarly¶ successful, stocks were large, and this salt—the

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* *Vide* table in note to para. 46.

† Total amounts manufactured at Sooltanpore in 1868-69, * ... ... Maunds. 7,11,934
Ditto ditto 1867-68, ... 5,76,908
Ditto ditto 1866-67, ... 6,72,902

‡ See further the separate notice of the Delhi Division.

§ *Vide* table in note to para. 46.

‖ It may be interesting to notice, that up to the commencement of 1867-68 the whole of the Kokan salt imported in the Central Provinces was derived from Panwell, Oorun, Matoonga, and other works on the Island of Bombay, or in its immediate vicinity. During the year under report, a good deal of salt has come from Bassein, being brought to Kullian and Dadur by boat and by the Bombay and Baroda Railway, and this trade seems on the increase.

¶ Total outturn of the Noh works in 1868-69, Maunds. 2,86,089
Ditto ditto 1867-68, 1,06,545
Ditto ditto 1866-67, 1,65,345

cheapest that crosses our Line (but never, owing to its inferior quality, a favourite staple) —went down in large quantities by rail to Jubbulpore, to supply in Bundelkund the demand resulting from the short supplies, through Jhansie, Saugor, and Hoshungabad, of Sambhur and Kansia. The produce of one works especially, the Malub Surr, large crystalled, and susceptible of being easily coloured with a little indigo and Mooltanee muttee to resemble Sambhur, was in great demand, and the Jubbulpore traders established agencies at Hattrass for its purchase and despatch. Not only, however, in Bundelkund and the Jhansie Division in the guise of Sambhur, but everywhere throughout Saugor and Hoshungabad, Noh* salts found their way (for the first time) into consumption, occasionally unmixed, but more commonly as an unacknowledged adulteration of Sambhur and Kansia.

Madras-coast, or Bunwar salt.

53. The decrease in Madras-coast salt has already been noticed when speaking of Kokan. I have only here to add, that a portion of the decrease observable in our recorded imports of Bunwar is due, first to the increase of smuggling† through the Raipore Line, and second, to the development of the trade that rounds our Eastern terminus (vide paragraphs 22-25.)

Further details to be found in the separate Divisional Notices.

54. Further details‡ in regard to local fluctuations in the import of the several descriptions of salt will be found in the brief Divisional Notices that follow this Review.

Increase in realizations apparently incommensurate with the increase of salt imported.

55. It will be noticed that the increase (as compared with those of 1867-68) in our salt realizations is not apparently commensurate with the increase in the quantity of salt which paid duty. In the quantity of salt there is an increase of 31,515 maunds, but in our realizations only an increase of Rs. 46,719. The fact is, that throughout the North-Western Provinces and the Punjab, all salt that crosses our Line pays Rs. 3 per maund duty, while a large proportion of what crosses in the Central Provinces—having already paid, or *at least being supposed to have paid*, the Madras and Bombay duties—pays only Rs. 1-8-0 on the Line. Now, owing to the extension of railway communication and other causes elsewhere noticed, the import of Bombay salt is largely increasing, and the import of full-duty paying salt consequently diminishing. It follows that an increase of imports does not necessarily involve an increase in realizations; nay, since it takes two maunds of Kokan to yield the same duty as one of Sambhur, a certain increase in our imports is compatible with a decrease in our revenue.

This due to the growing increase in the imports of half-dutied staples.

Already Bombay and Madras are supposed to levy nearly nine lakhs on account of salt consumed in Central Provinces.

56. Steadily,§ year by year, the import of the half-dutied staples is increasing; already Bombay and Madras are supposed to levy Rs. 8,70,000‖ on account of salt

* For further remarks in regard to the Noh works, *vide* the separate notice of the Delhi Division.

† *Vide infra*, paragraph 149.

‡ I may here note that of the total quantity of salt that crossed our Line in 1868-69—

13,63,852·5	maunds	crossed the Punjab Section.
15,79,775·25	,,	,, North-Western Provinces Section.
7,82,925·5	,,	,, Central Provinces Section.

While the various divisions, arranged in order according to the amounts of salt that *actually* crossed their respective Lines, stand as follow:—

	Maunds.		Maunds.
Delhi, ...	11,28,269	Hansie, ...	2,29,579·75
Agra, ...	9,18,815·5	Raipore, ...	1,59,194·5
Muttra, ...	5,39,405	Jhansie, ...	1,21,654
Nagpore, ...	3,29,803·25	Hoshungabad, ...	50,484·25
Saugor, ...	2,44,159	Sirsa, ...	5,994·25

§ Detail in Maunds of Salt paying Full and Half Duty.

Year.	Punjab Section, quantity paying Rs. 3 per maund.	North-Western Provinces Section, quantity paying Rs. 3 per maund.	Central Provinces Section, quantity paying Rs. 3 per maund.	Total paying Rs. 3 Duty.	Central Provinces Section, quantity paying Rs. 1-8-0 per maund.	Grand Total.
1868-69, ...	14,29,168	15,72,729	1,87,960	31,89,857	5,80,480	37,70,337
1867-68, ...	14,01,732	15,03,516	2,85,050	31,90,298	5,48,523	37,38,821
Corresponding 12 months of 1866-67,	14,30.065	17,16,318	3,49,778	34,96,246	4,82,667	39,78,913
Ditto ditto, 1865-66,	11,47,852	15,39,787	3,26,186	30,13,825	4,05.408	34,19,233

‖ This *excludes* three lakhs which Bombay is supposed to realize on salt consumed in the *Berars*, which, like the Central Provinces' salt, only pays half duty on crossing our Berar Line. Neither this Berar Line, nor its realizations, charges, imports, &c, are noticed in this General Review, as it forms as yet no part of the imperial Inland Customs' Line; but a separate notice will be found in Appendix III.

consumed within our Line, and the amount so levied when the Great Indian Peninsula Line is complete to Jubbulpore, will certainly not fall short of twelve lakhs of rupees.

Essential to make sure that this duty really *is* levied.

57. It is of great importance to make sure that this salt really has paid the half-duty before it reaches our Line. At present we have not only no security that such is the case, but we have strong reasons for believing that a considerable proportion of it has not paid any duty anywhere, but is in fact smuggled* salt.

Procautions absolutely necessary.

58. I prominently called attention to this matter last year; I again earnestly recommend that no salt be allowed anywhere to cross our Line at half-duty rates, unless covered by a Bombay or Madras pass, *proving* that half-duty *has* already been levied on it.

Dryage allowance of three per cent. now granted for Kokan salt is excessive, and should be reduced to one per cent.

59. There is another point connected with Kokan salt requiring prominent notice, and that is the excessive amount of the present dryage allowance. Under existing rules, when weighing salt at Kullian, &c., we only charge duty on 97 maunds for every 100 maunds we weigh. This three per cent. allowance was made under the idea that salt leaving the humid seaboard would be rapidly desiccated and lose considerably in weight on reaching the dry table-lands of Central India. Throughout the past year, reweighments have been weekly conducted at Boorhanpore, under my orders, to test the real loss by dryage. Out of several hundred weighments, conducted at all seasons and embracing 6,627 maunds, in no *one* case did the loss by dryage amount to even two per cent., and the aggregate loss on the whole quantity was 82 maunds, or less than one and one-quarter per cent. Altogether, this dryage of three per cent. was allowed on 4,32,454 maunds, so that the loss to Government by allowing three per cent. instead of one and one-quarter per cent., was Rs. 11,350. This was on the Imperial Line alone; the Berar revenue suffered from the same cause by Rs. 5,200. There is really no earthly reason for continuing this excessive dryage allowance, which should, I recommend, be reduced to one per cent., at which rate it stands for all other salts throughout the Line.

SUGAR.
Decrease in realizations of 30 per cent., in quantity exported 22 per cent.

60. Turning now to sugar, it has been seen† that the decrease in our realizations on this article is slightly over 30 per cent. The actual decrease in the total amount of sugar exported‡ is, however, only about 22 per cent. The fact is that in refined sugar, which pays us Re. 1 per maund, there has been a falling-off of 35⅓ per cent., while in the unrefined article (at all times the major portion of our exports), which pays us only six annas, the loss has only been 18½ per cent.

Causes of decrease already explained.

Reasons for the decrease being no larger than it is.

Half of the decrease yet remains to be shown in the current year's accounts.

61. The causes of the stagnation in the sugar trade during the past year have been already noticed,§ and are, moreover, so patent as to need no further comment; but it may be necessary to explain why the terrible calamity which involved so large a proportion of the consumers of our exports failed to effect our revenue even more seriously. In reality, the decrease directly due to the famine has been divided between *two* official years; and that portion of it, amounting to nearly five lakhs of rupees, which is shown in the accounts of the year under report, is not much more than one-half of the loss that we shall altogether sustain.

62. During the first three or four months of 1868-69 the sugar trade was brisk, a larger proportion even than usual of refined sugar crossing the Line. It was not until

* See, further, the separate notice of the Nagpore Division.

† *Vide* table in note to paragraph 36.

‡ PROPORTION OF REFINED AND UNREFINED SUGAR EXPORTED ACROSS THE INLAND CUSTOMS' LINE.

Year.	Refined.	Unrefined.	Total.
	Mds.	Mds.	Mds.
1868-69, ...	7,25,097	10,90,927	18,16,024
1867-68, ...	11,21,296	13,39,051	24,60,347
Corresponding 12 months, 1866-67, ...	9,11,928	13,48,991	22,60,919
Ditto ditto, 1865-66, ...	9,70,336	14,33,827	24,04,163

§ *Vide* paragraph 6.

the total failure of the autumnal harvest became certain that the trade was seriously checked; per contra, the depression continued not merely to the close of the official year under report, but throughout the early months of the current year, and must continue until a good harvest once more puts our customers in funds to purchase luxuries. Another, though minor, cause of the comparatively small decrease in our realizations, was that the famine did not extend to that portion of the Central Indian agency, &c., chiefly supplied across the Central Provinces Line, and that hence the sugar revenue of these Provinces (at no time large, it is true) exhibits an increase instead of a decrease.

Reasons for the decrease being proportionably much greater in refined than unrefined sugar.

63. The vast falling-off in refined as compared with unrefined sugar requires notice. In the first place, the effect of the famine was to make people who formerly ate refined sugar content themselves with unrefined only, while those who used to eat unrefined only, had to give up sugar altogether; in the second place, refined sugar was unusally scarce and dear during the latter part of the past year. It is stated to be an ascertained fact by practical agriculturalists, that the proportions of refined and unrefined sugar which, according to the ordinary Native methods of manufacture, can be educed, depend most materially on the amount of watering, natural or artificial, that the cane has received during growth. The less water the cane gets, the less refined sugar can (by the common Native process) be made from its juice. It is notorious that in the Central Provinces where cane is scarcely ever half watered according to our up-country ideas, hardly any refined sugar can be made. In the Doab, the belief is that as a rule more refined sugar is yielded by canal than by well-watered cane, the former generally getting a far more liberal supply of water than the latter can possibly receive. Should this generally-spread belief have any good foundation, it is easy to understand how the scanty rain-fall of the past year throughout almost the whole extent of our Upper Indian sugar-fields, and the restriction of canal water (inadequate to supply all demands) to food-crops, may have led to a smaller proportional produce than usual of refined sugar, even from such* cane-crops as actually reached maturity.†

Our present system of levying Sugar duties anomalous.

64. Our present system of levying duties on sugar involves an anomaly. From Kuhror, on the west bank of the Sutlej (opposite Mooltan), down to the banks of the Nerbudda, in the Saugor Division, we tax both refined and unrefined; from the banks of the Nerbudda to those of the Mahanuddee, we tax only the former; while from the Sutlej to the Indus we tax neither. It is fully admitted by all who have enquired into the matter that no sufficient causes *now* exist (whatever may have been the case in past times) for these illogical differences.

The duties should either be abolished or levied uniformly along the whole Line.

65. The time has clearly now come either to abolish or impose these duties throughout the whole vast Line, which with the exception of the slight gap between Leia and Kuhror, extends from Kohat to the Cuttack tributary mehals.

The abolition of these duties in the present state of finances to be deprecated.

66. I myself earnestly deprecate the abolition of duties which, if uniformly imposed throughout this Line, would yield at least £200,000 per annum. True, these are export duties, but they are *sui generis*. They are so light (they average, taking all qualities of

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* As has been previously noticed, a large portion of the cane-crops either withered or had to be utilized as food for cattle.

† Full details in regard to local fluctuations in the sugar trade, the places of produce of the sugar crossing in each division, the average prices during the past year, &c., will be found in the separate Divisional Notices annexed to this General Review; but I may here notice, that of the total quantity of sugar that crossed the Inland Customs' Line in 1868-69—

13,37,856 maunds crossed in the Punjab Section,
8,19,288·5 diito North-Western Provinces Section,
70,893 ditto Central Provinces „

And that the various divisions arranged in order of the quantities of sugar that actually crossed their respective Lines stand as follow—

Delhi, ...	Mds.	8,93,377·25	Jhansie, ...	Mds.	1,28,371·5
Agra, ...	„	4,34,822;75	Saugor, ...	„	38,760·25
Hansie, ...	„	2,83,442·75	Nagpore, ...	„	16,847·5
Muttra, ...	„	2,56,094·25	Hoshungabad,	„	14,888·
Sirsa, ...	„	1,61,036·	Raipore, ...	„	357·25

sugar, less than 9 per cent. *ad valorem*) as to bear but a small proportion to the actual value of the goods; they are realized without any cost, our salt revenue independently requiring the maintenance of the whole staff employed in their collection; they are paid by either our own subjects, who escape the salt duty, or by the subjects of foreign States; and the tract of country supplied by the taxed article can go to no other markets for its supplies.

All ordinary arguments against export duties inapplicable to the present case.

67. All ordinary arguments against export taxes fail here; all that can possibly be urged is, that if we abolished these duties the people of Rajpootana would take more sugar, and probably in return send us more salt. There was, doubtless, some weight in this argument when Upper India was dependent on Rajpootana for salt, and a possible salt famine seemed staring us in the face; but with the Sambhur lake under our own management, internal manufactories in Oudh and the North-Western Provinces—one railway tapping our Sooltanpore works and the Sambhur lake, another our Punjab mines, and a third putting Bombay-coast salt in the Allahabad market cheaper than the better Rajpootana salts can get there (and all this will be *un fait accompli* within three years)—the argument appears to me invalid, and I submit that the gain in salt can never under these new conditions counterbalance one tithe of the loss which we shall sustain by abandoning this, under the circumstances, clearly defensible source of revenue.

Miscellaneous revenue.

68. Our miscellaneous Line receipts* slightly exceed those of the previous year, but this source of revenue, the major portion of which consists of nominal credits, savings of salaries, or proceeds of confiscations, double duty, and the like, distributed ultimately as rewards and debited under miscellaneous expenditure, needs no special notice.

INTERNAL DEPARTMENT.
Realizations.

69. The realizations of the Internal Branch of the Department again exhibit† a slight falling-off. Created to suppress the illicit manufacture of salt, extensively carried on under cover of manufacturing saltpetre and the sulphate and carbonate of soda, the Department (principally in view to securing an accurate registry of all works of this nature) only allows them to be carried on under licenses, and charges a larger or smaller fee for the issue of these. Again, since the eduction of considerable quantities

* MISCELLANEOUS RECEIPTS.

Description of Receipts.	1868-69.	1867-68.
	Rs. As. P.	Rs. As. P.
Confiscation and double-duty shares, ...	34,989 1 5	40,222 0 5
Fines and forfeitures, savings from pay, petty repairs, &c., ...	15,946 1 0	5,504 2 10
Fees on maâfee and atrafee rowannahs, ...	164 0 11	139 8 0
Sale proceeds of goods, ...	742 15 10	775 6 5
Half-fines, ...	561 6 10	...
License-tax, ...	2,798 14 6	2,640 0 0
Miscellaneous petty items, ...	114 14 0	306 7 2
Unclaimed deposits, ...	3,098 15 3	1,048 11 0
TOTAL, ...	58,416 5 9	50,636 3 10

† REALIZATIONS OF THE INTERNAL DEPARTMENT.

Year.	Duty on Salt.	License-fees.	Fines and Confiscations, &c.	Total.
	Rs.	Rs.	Rs.	Rs.
1868-69, ...	43,612	47,727	1,548	92,887
1867-68, ...	44,022	54,764	1,439	1,00,225
Corresponding 12 months of 1866-67, ...	67,900	46,487	1,231	1,15,618
Ditto 1865-66, ...	91,992	41,858	3,726	1,37,076

of more or less pure edible salt is in Upper India unavoidable in refining saltpetre, the purification of this so as to render it fit for sale is permitted, and a duty (the same as that paid by other salts on crossing the Line) levied on the produce.

Decrease in duty realizations due to decrease in the saltpetre trade.

70. Of course where manufacture is honestly conducted, or vigilantly watched, the quantity of salt turned out, and of duty realized thereon, is exactly proportional to the amount of refined saltpetre produced. Of late years the Indian saltpetre trade (our produce being unable to compete with the article artificially manufactured in Europe, notably from the refuse of the Silesian salt mines) has greatly decayed, and with it, year by year, the duty realizations of the Internal Branch have declined.

License-fees remain nearly *in statu quo*.

71. In licenses, the total of the fees levied has during the last four years remained nearly *in statu quo*, chiefly because, while the number of crude saltpetre works and refineries has greatly decreased, kharee (or sulphate of soda) works have multiplied, and in the North-Western Provinces pay a license-fee of Rs. 25, instead of, as formerly, only Rs 2.*

Slight decrease explained.

72. The slight decrease in license-fees during the past year, as compared with that immediately preceding it, is due mainly to our having refused licenses to many works in which during the previous twelve months illicit manufacture had been detected. This refusal, under ordinary circumstances much to be deprecated, was, as will be fully explained when dealing with the penal action of the Department, unavoidable in the first year after the important relaxation of our rules, sanctioned on my recommendation during 1867-68 by the Governments of the North-Western Provinces and Oudh (*vide* paragraphs 127-131).

CHARGES.

73. Turning now to the net financial results of the year's administration, we are met with an increase in round numbers of one lakh of rupees, or 7 per cent., in the total charges.†

Increase in charges due to the recent amelioration of the position of both officers and men: Salaries.

74. This increase is due solely to the improved position in which Government has placed our men and officers during the past year. Rs. 84,000 alone are due to the increase in salaries; where a force numbers 14,000 members‡ even a *moderate* general increase, for only half the year, necessarily entails a large extra outlay.

Travelling allowances;

75. Then, our Collectors have been granted travelling allowances more adequate to the expense entailed upon them by their divisional tours, and a proper amount of carriage for their tents and records has been allowed. This has increased our expenditure

* Detailed reviews of the administration of the Internal Branch of the Department in the North-Western Provinces and Oudh, will be found in Appendices I. and II.

† TOTAL CHARGES.—*With Corresponding periods of Twelve Months of—*

Year.	Line.	Internal.	Total.
	Rs.	Rs.	Rs.
1868-69, ...	13,34,993	2,34,791	15,69,784
1867-68, ...	12,58,486	2,11,275	14,69,761
1866-67, Corresponding 12 months, ...	12,28,419	2,09,947	14,38,366
1865-66, ditto, ...	11,74,044	2,31,385	14,05,429

‡ MEMORANDUM SHOWING THE TOTAL STRENGTH OF THE INLAND CUSTOMS DEPARTMENT.

Branch of Service.	Total Number of Officers.	Total Number of Petty Officers.	Total Number of Men.	Grand Total.
Line, ...	116	1,825	10,345	12,286
Internal, ...	20	674	943	1,637
Total, ...	136	2,499	11,288	13,923

Tents;

some Rs. 7,000. Government tents, again, have been provided for all Deputy Inspectors in the Internal Branch; which, considering that they receive no travelling allowance or house-rent, and are expected to be in camp nine months of the year, was only just.

Half-fines.

Lastly, in place of head-money—the whole of fines actually paid, and one-eighth of fines imposed but not realized, in Customs cases—our men now receive one-half* of the fines imposed in every case; this has increased our† expenditure by Rs. 1,400. Altogether, these various measures, designed to raise the status of the force, have added one lakh to our gross charges, and some of them having been in force for only a portion of the past year, will even further swell those of the current year. That this increase should have been forced on us is a matter for regret, but a radical improvement in the position of our officials having proved unavoidable, it only remains to hope that the State will reap the usual beneficial results of a wise liberality.

Increase in charges to be regretted, but has proved unavoidable.

NET RECEIPTS and PERCENTAGE OF CHARGES ON REALIZATIONS.

76. This increase in expenditure (coupled with the decrease in realizations, already noticed and explained) has reduced our net revenue‡ to little above one million sterling, and raised the percentage of charges‡ on collections to 13·387.

77. Owing, as I last year explained, to the manner in which the realization of the three great departments (the Punjab mines, the Inland Line, and Bengal Salt Customs) are each mutually dependent on the vigilance of the other two, it is impossible to guage accurately the extent to which expenditure in the one has increased the revenue of the others, and equally impossible to say positively of any one Department that its charges bear too large a proportion to its collections.

The whole of the expenditure has been minutely scrutinized, and hopes are entertained that some savings and reductions may be effected.

78. Still the percentage this year exhibited gives grave cause for consideration, the more so that it will probably be higher§ next year, and I have, in consequence, most earnestly scrutinized our expenditure. I have been unable to discover a single irregular or objectionable charge, or even a single charge that I can positively assert need not have been incurred. At the same time my review has led me to believe that some expenditure, especially in public works, might be avoided, and some reductions effected. The matter is of the highest importance, and besides myself checking with increased watchfulness all our outgoings, I have endeavoured (*vide* my Circular No. 87, Appendix E.) to impress upon all my subordinates the absolute necessity of co-operating in a vigorous attempt to economize and effect reductions.‖

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* Or such smaller portion as we consider an adequate reward with reference to the circumstances of the case.

† This, however, is more or less nominal. Rs. 16,961 have actually been realized by the judicial tribunals as fines in cases prosecuted by the Department; while we have only paid Rs. 5,544 as half-fines. I contend that either the fines realized should be credited to us, or the half-fines debited to the Judicial Department. The Government of the North-Western Provinces supports this view, but as yet the Account Department have not agreed to it.

‡ NET RECEIPTS.—*Compared with those of Corresponding Twelve-monthly Periods.*

Year.	Gross Receipts.	Charges.	Net Receipts.	Percentage of Charge on Realization.
	Rs.	Rs.	Rs.	Rs.
1868-69, ...	1,17,25,775	15,69,784	1,01,55,991	13·387
1867-68, ...	1,21,67,857	14,69,761	1,06,98,096	12·079
Corresponding 12 months of 1866-67, ...	1,28,01,192	14,38,366	1,13,62,826	11·234
Do. 1865-66, ...	1,13,31,788	14,05,430	99,26,358	12·4

§ I say this because, as already noticed, some of the improvements in the pay of the force have been in operation only seven months of the year under report. Of course we ought to have a larger income, but the scarcity continued up to August, 1869, and even now the rains have not everywhere by any means been propitious, and the rain-crops are reported as altogether lost in parts of Rajpootana and the Punjab.

‖ It is only right to notice, that our real percentage of cost on collections is not quite so high as, owing to our present system of accounts, it is made to appear. Nearly half a lakh of rupees is charged on *both* sides, either first credited as confiscation and double-duty shares, and then debited when paid away to the captors in seizure cases, or first debited as salary, petty repairs, &c., and then credited again as savings. Deducting this dead weight from both sides of the account, the real percentage is exactly 13, instead of 13·387.

PROVINCIAL RESULTS

79. Closely interwoven* as are the interests of the three great Salt Departments of Continental India, still more closely so are those of the various provincial sections of the Inland Customs. The Customs-houses of one Province collect the revenue on large quantities of the salt and sugar which actually cross the Line in another; defective arrangements in one section affect at once the revenue of its neighbours; or a sudden stoppage in the imports of the one stimulates† immediately those of the others.

of comparatively little value.

80. No great value can, under these circumstances, attach to provincial details; but a passing notice here of some of the more prominent of these, so far as financial results are concerned, may seem desirable.

Provincial gross realizations.

81. The Punjab‡ this year contributes (in round numbers) 48½ lakhs, a sum as nearly as possible corresponding with the *average* of its collections for the past four years. The North-West Provinces give 53 lakhs, a sum but slightly below the average of their realizations for the same period; of this amount, more than eighty thousand rupees are due to the Internal Branch. The Central Provinces have yielded over 15½ lakhs, a sum considerably below *their* average for the past four years; while Oudh, in which the Internal Branch has since the decline in the saltpetre trade become almost purely a preventive establishment, yields only Rs. 11,600—not half what it gave in 1865-66, and less than two-thirds of its average realizations during the previous three years. These figures, however, afford no criterion of the extent to which these several Provinces contribute to the Imperial exchequer. Fully 21 lakhs of the revenue derived from the Punjab and North-Western Provinces Lines, are realized on salt consumed in Oudh; while, to give only a single other instance, Bombay and Madras realize nearly nine lakhs on account of salt consumed in the Central Provinces.

Charges.

82. As regards the charges incurred in each Province, it will be seen§ that in round numbers the Punjab cost 3½, the North-Western Provinces 6¾, Oudh ½, and the Central Provinces somewhat less than 5 lakhs.

* By the Punjab mines, the Inland Customs, and the Bengal Salt Customs.

† As happened during the past year, when the failure of the Bunjara-carried supplies for Hoshungabad, Saugor, and Jhansie, at once sent up the imports of Agra, Muttra, and Delhi.

‡ PROVINCIAL DETAILS—GROSS REALIZATIONS.

Year.	*Punjab.*	*N.-W. Provinces.*			*Oudh.*	*Central Provinces.*	Total.
	Line.	Line.	Internal.	Total	Internal.	Lines.	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1868-69, ...	48,58,174	52,17,442	81,294	52,98,736	11,593	15,57,272	1,17,25,775
1867-68, ...	51,37,685	51,51,428	87,614	52,39,042	12,611	17,78,519	1,21,67,857
Corresponding twelve months of 1866-67,	51,94,598	56,09,630	1,00,138	57,09,768	15,480	18,81,345	1,28,01,191
Corresponding twelve months of 1865-66,	43,54,827	51,49,704	1,07,417	52,57,119	29,658	16,90,184	1,13,31,788
Total, ...	1,95,45,284	2,11,28,202	3,76,463	2,15,04,665	69,342	69,07,320	4,80,26,611
Average, ...	48,86,321	52,82,050	94,116	53,76,166	17,335	17,26,830	1,20,06,653

§ PROVINCIAL DETAILS—CHARGES.

Year.	*Punjab.*	*North-Western Provinces.*			*Oudh.*	*Central Provinces.*	Total.
	Line.	Line.	Internal.	Total.	Internal.	Line.	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1868-69, ...	3,56,952	4,96,084	1,78,453	6,74,537	56,338	4,81,957	15,69,784
1867-68, ...	3,40,912	4,49,597	1,56,681	6,06,278	54,594	4,67,977	14,69,761
1866-67 (corresponding 12 months of), ...	3,21,670	4,54,109	1,55,667	6,09,776	54,281	4,52,639	14,38,366
1865-66 (ditto ditto), ...	3,18,264	4,51,386	1,70,135	6,21,521	61,250	4,04,395	14,05,430
Total, ...	13,37,798	18,51,176	6,60,936	25,12,112	2,26,463	18,06,968	58,83,341
Average ...	3,34,449	4,62,794	1,65,234	6,28,028	56,615	4,51,742	14,70,835

FINANCIAL RESULTS.

Percentage of charges on realizations.

83. But these figures, as well as the percentages* that in each section and branch these charges bore to realizations, are useless as tests either of the merits of local financial administration, or of the comparative value to the State of the several branches of the Department, for the simple reason that it is impossible ever to apportion to any one section the real amount of the public revenue due to the outlay debited to it.

When we find the percentages of cost of the North-Western Provinces and Punjab Sections of the Line 9 and 7 respectively, and those of the North-Western Provinces and Oudh Internal Branches—to which the former owe fully one-fourth of their realizations—219 and 486 respectively, it is needless to say that these figures, though possessing a certain statistical value, are worthless so far as any practical inferences are concerned.

SUPPY AND PRICE OF SALT.

SUPPLY.

Important measures sanctioned by Government during the past year for facilitating the import, and increasing the supply, of salt.

84. In regard to the supply of salt I need this year say comparatively little. Since my last Report was submitted, the whole subject has been under the consideration of the Government of India, and numerous important measures adopted to ensure an ample, constant, and certain supply of salt to the population in rear of the Line, at as cheap a rate as is compatible with the duty now levied. The Branch Railway from Delhi, through the Sooltanpore works, to Rewaree† (which ultimately is to be prolonged to the Sambhur lake, *via* Ulwar and Jaipore) has been approved and surveyed, and is to be proceeded with at once. The Peshawur Line has been settled, and orders given to arrange at once for cross-roads from its stations to the Shahpore mines, near to which it will run. The Agra and Sambhur Line, which will probably be so taken as to traverse all the more important Bhurtpore Salt-works, awaits now only the settlement of details. Arrangements are being effected for our taking charge of the Sambhur lake, thereby enabling us to regulate the price at the source, and to prevent the possibility of our people losing the advantage which the cheap carriage our railways will afford ought to give them, in consequence of any enhancement of the prime cost. Lastly, the opening of local salt-works in Oudh and the North-Western Provinces has been sanctioned.

These measures cannot fail to cheapen salt.

85. All these measures collectively cannot fail to reduce considerably, in the course of the next three years, the cost of our taxed salt to the consumers in Upper India.

PRICE.

The price of salt has been carefully watched and noted throughout the year in every district of the Punjab, North-Western and Central Provinces, and Oudh.

The results collated and classified.

86. Throughout the year, we have carefully watched the prices of the more important salts in the leading marts of *each* of the districts of the Punjab, the North-Western and Central Provinces, and Oudh. Every endeavour has been made to induce the District Officers to furnish us with really reliable monthly returns, which we have, moreover, in many places been able to check by those of our own officials. The whole of our own and the district officials' returns have been most carefully collated, doubtful

* PERCENTAGES OF COSTS ON COLLECTIONS.

Year.	*Punjab.*	*North-Western Provinces.*			*Oudh.*	*Central Provinces.*	Total.
	Line.	Line.	Internal.	Total.	Internal.	Line.	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1868-69, ...	7·345	9·5	219·315	12·73	485·96	30·948	13·387
1867-68, ...	6·635	8·727	178·831	11·572	432·9	26·312	12·079
1866-67. (corresponding 12 months of), ...	6·227	8·095	155·452	10·679	350·646	24·064	11·234
1865-66 (ditto ditto), ...	7·273	8·745	159·341	11·822	206·521	23·926	12·4
Total, ...	27·47	35·067	713·139	46·803	1467·38	105·25	49·127
Average, ...	6·87	8·767	178·285	11·701	366·34	26·31	12·282

† A commission, consisting of Messrs. C. Currie and C. Kellow C. Pye, as members, and myself as President, was appointed by the Government of India, to examine this Line and report on the course which, in the interests of the salt trade, it was most desirable for it to take. After minutely inspecting the locality, the Commission submitted a report, which has been approved and acted on.

entries eliminated, and an average for each mart struck for the year. Marts and districts outside our cordon have been rejected; and, assuming the value of the rupee to be 1*s.* 10*d.*, and taking as the staples of each district those salts which have sold cheapest there during the year, I have prepared a table (which will be found in Appendix F.) showing the districts of each Province the poorer members of whose populations were able to consume their salt at 0½*d.*, 0¾*d.*, 1*d.*, &c., per lb. during the year under report.

will be found in Appendix F.

87. To render this return more complete, I have also entered all the districts of Bengal, according to price-currents* furnished thence.

Bengal Districts also included in this return.

88. It will be seen† that, of the 139 districts comprised in this table, containing a population of 98,517,135, one only (Kangra, Punjab—population 727,148) consumed salt (from Mundi) at prices not exceeding‡ 0½*d* per lb.; two only (Hooshyarpore and Simlah, Punjab—population 972,885) paid prices exceeding 0½*d.*, but not exceeding 0¾*d.* per lb.; eight districts (seven of the Punjab and one of the North-Western Provinces—Muttra—aggregating a population of 4,112,791) paid more than 0¾*d.* but not more than 1*d.*; thirty-six districts—thirteen of the Punjab (population 8,497,275), fourteen of the North-Western Provinces (population 11,909,513), two of the Central Provinces (population 670,812), and seven of Bengal (population 7,299,118)—aggregating a population of 28,376,718, paid more than 1*d.*, but not more than 1¼*d.*; fifty districts—*viz.*, three of the Punjab (population 2,057,128), ten of the North-Western Provinces (population 8,780,879), twelve of Oudh (population 8,326,647), three of the Central Provinces (population 1,009,640), twenty-two of Bengal (population 17,544,407)—aggregating a population of 17,685,407, paid more than 1½*d.*, but not more than 1¾*d.*; thirteen districts—*viz.*, seven of the North-Western Provinces (population 5,253,978), two of the Central Provinces (population 135,147), four of Bengal (population 2,469,857)—aggregating a population of 7,858,982, paid more than 1¾*d.*, but not more than 2*d.* per pound; and three districts (one of the Central Provinces and two of Bengal) aggregating a population of 1,064,503, appear to have paid more than 2*d.*, but less than 2¼*d.* per lb.

Resumé of what the return shows.

* Some of these, however, contain internal evidence of being incorrect, and can scarcely as a body be accepted as equally reliable with those prepared for the North-Western Provinces, Oudh, the Central Provinces, and the Punjab, where tehseeldars, who send separate returns, are scattered over every district, and where special attention has in most places been paid to the matter.

† I note that, 0½*d.* per lb. is equivalent, at 1*s.* 10*d.* to the Rupee, to 21·39 seers per Rupee.

0¾*d.*	ditto,	ditto	14·26
1*d.*	ditto,	ditto	10·69
1¼*d.*	ditto,	ditto	8·55
1½*d.*	ditto,	ditto	7·13
1¾	ditto,	ditto	6·11
2*d*	ditto,	ditto	5·34
2¼*d.*	ditto,	ditto	4·75
2½*d.*	ditto,	ditto	4·27

‡ I introduce here, for facility of reference, a SYNOPSIS OF APPENDIX F.

Rate per Pound.	*Districts and their Population, consuming at each Rate.*										Total.
	No. of Districts.	Punjab.	No. of Districts.	N.-W. P.	No. of Districts.	C. P.	No. of Districts.	Oudh.	No. of Districts.	Bengal.	
Not exceeding 0½*d.*	1	727,148	...	...	...	...	...	...	...	...	1 727,148
Exceeding 0½*d.* and not exceeding 0¾*d.*	2	972,885	...	...	...	...	...	...	...	...	2 972,885
„ ¾*d.* „ 1*d.*	7	3,312,470	1	800,321	...	...	...	...	...	...	8 4,112,791
„ 1*d.* „ 1¼*d.*	13	8,497,275	14	11,909,513	2	670,812	...	...	7	7,299,118	36 28,376,718
„ 1¼*d.* „ 1½*d.*	3	2,057,128	10	8,780,879	3	1,009,640	12	8,326,647	22	17,544,407	50 37,718,701
„ 1½*d.* „ 1¾*d.*	...	...	3	2,868,895	10	4,799,703	...	...	13	10,016,809	26 17,685,407
„ 1¾*d.* „ 2*d.*	...	...	7	5,253,978	2	135,147	...	...	4	2,469,857	13 7,858,982
„ 2*d.* „ 2¼*d.*	...	...	...	...	1	780,503	...	...	2	284,000	3 1,064,503
Total, ...	26	15,566,906	35	29,613,586	18	7,395,805	12	8,326,647	48	37,614,191	139 98,517,135

N. B.—In this Appendix the population is given, so far as Bengal is concerned, according to the Bengal returns, and not according to the population assumed by me with reference to the extent of cultivation.

SUPPLY AND PRICE OF SALT.

Proportion of the total population consuming at each rate.

89. It would seem, therefore, that of the population of 98,517,135, in regard to the prices of whose supplies we possess statistics—

727,148	or 0·738	per cent.,	paid up to	0¼ *d.*,	per lb.,	or did not obtain	less than 21 seers 6¼ chittacks	s. c.	s. c.	for the Rupee on the average during the past year.
972,885	or 0·987	per cent.,	paid above	0¼	but not more than	0½ per lb.,	or obtained from	14 4	to 21 6	per Rupee on the average.
412,791	„ 4·277	ditto		0¾	ditto	1 ditto		10 11	„ 14 4	ditto.
28,376,718	„ 28·803	ditto		1	ditto	1¼ ditto		8 8¾	„ 10 11	ditto.
37,718,701	„ 38·286	ditto		1¼	ditto	1½ ditto		7 2	„ 8 8	ditto.
17,685,407	„ 17·951	ditto		1½	ditto	1¾ ditto		6 1¾	„ 7 2	ditto.
7,858,982	„ 7·977	ditto		1¾	ditto	2 ditto		5 5½	„ 6 1	ditto.
1,064,503	„ 1·080	ditto		2	ditto	2¼ ditto		4 12	„ 5 5	ditto.

These were *retail* prices. It is not intended to assert, that all these people *did* buy saltat these prices; the richer classes, doubtless, bought the best and most expensive kinds of salt, but these are the prices at which the cheapest kinds of good edible salt were available *to* and were consumed by the masses—the poorer classes, in fact—with whom we are chiefly concerned, as it is these, if any, who will feel the pressure of our salt duties.

Three districts where prices are exceptionally low are consuming untaxed salt.

90. The three districts that now obtain their salt at prices not exceeding 0¾*d.* per lb., are consuming untaxed Mundi salt; and as soon as we make proper arrangements about the mines, these will be relegated to the 1¼*d.* column.

COMMUNICATIONS.

Excluding Bengal, there are 23 districts where salt is exceptionally dear.

91. Excluding the Bengal Districts with which I am not concerned, there remain twenty-three, where the population have to pay more than 1½*d.* per lb. for the salt they consume. It remains to consider what measures are in progress, or desirable, to cheapen to them their supplies of what is admittedly a prime necessary. This is the more important, because the price of salt may often aptly serve us as an index to the facilities that exist in any locality for general commerce. We may be pretty sure that where salt can only find its way with difficulty, and at high prices, there trade in English cloths, hardware, and the like, is stunted if not absolutely non-existent, and the improved communications designed in the first instance to furnish cheaper salt to our people, will commonly open new fields for the consumption of those articles of commerce, in which the strength and prosperity of the British empire so largely depend.

Measures necessary to cheapen salt in these, equally desirable in the interests of commerce generally.

Central Province Districts.

Measures in progress or needful.

92. To return: these twenty-three districts divide themselves into separate groups, which each require notice. The completion of the G. I. P. Railway will ensure ample supplies of cheap Kokan to HOSHUNGABAD, NURSINGPORE and JUBBULPORE; but, in connection with these, the speedy completion and efficient maintenance of *really good* tramroads from Nursingpore to SAUGOR, and Jubbulpore to DUMOH and MUNDLA, are necessary to the supply of these latter districts. The continuation of the Mundla tramroad to RAIPORE (a *road* is already in progress) with branches to Dhunsooa (BALAGHAT) and BELASPORE (and Ruttunpore) will, to a certain extent, meet the requirements of these districts; but, to open out Balaghat properly, the tramway to Dhunsooa should be continued to Bhundara, *via* Hullah; and to open out the Chutteesgurh country effectually, another tramway should run from Nagpore, *via* Bhundara to Raipore. For BAITOOL, either the existing Hoshungabad Road should be improved and utilized for a tramway, or a new line taken (if the many cross spurs of the Satpooras permit) direct to Hurda. The Chanda coal-fields, if successful, will ensure railway communication with Nagpore and a supply of cheaper salt to CHANDA. If the projected railway connection of Nagpore and Jubbulpore be decided on, SEONEE, and, with proper feeders, Mundla and Balaghat, would obtain *all* their imports as readily as the majority of our Continental Indian districts, but even if a railway prove impracticable, a tramway from Nagpore to Jubbulpore is, I conceive, a necessity. I do not see what more can be done for Belaspore, than has above been suggested, or that anything can be done for SUMBULPORE, unless, indeed, one or other of the present Cuttack roads were remodelled for a tramway, or a new and direct one constructed, on a scale and at a cost which the physical difficulties of the country, and the rude nature and sparsity of the populations through which the major portion of any Cuttack and Sumbulpore line *must* run, seem to render hopeless. Generally in

regard to these Central Provinces' Districts, it must be borne in mind that the scantily-populated and ruggedly-hilly tracts which they comprise, necessarily oppose unusual obstacles to those facilities for intercommunication essential to the cheapness of a bulky article like salt, especially where this has to be brought from great distances and pay a heavy duty. Moreover, though much still remains to be done, the progress, so far as communications are concerned, in these Provinces during the past seven years has been very great, although not to my notion, as I shall explain further on, exactly in the right direction.

North-West Provinces, and Oudh.

93. JALOUN, JHANSIE, and LULLUTPORE, are at present most unfortunately isolated, and are, in consequence, always liable to suffer from short supplies, *not only of salt, but of all necessaries.* A good tramway, in continuation of that from Nursingpore to Saugor, through Lullutpore, Jhansie, Ingwee, and Calpee, to Cawnpore, with a branch to Jaloun, is, I believe, essential. Considerable portions of a fair road connecting these points are already in existence, but they would require, of course, considerable improvement and modification before they could be utilized for a tramway.

94. The Oudh and Rohilkund Railway will provide for BAREILLY, and the line designed to connect the Kumaon ironworks with this railway will afford the desired supply of salt at reasonable prices to KUMAON and the TERAI.

95. There remain only JOUNPORE and AZIMGURH, BUSTEE and GORUCKPORE, for which the line from Fyzabad to Buxar with two, or at most three, comparatively short feeding tramways, would apparently suffice; so that out of the whole twenty-three districts in which at present the average retail price, in the leading local marts, of the salt consumed by the masses exceeds three half-pence a pound, there is only one (Sumbulpore) in regard to which a reasonable prospect of materially cheapening salt does not exist.

Our present road system apparently open to some objections.

96. In considering, as during the past year I have been compelled to do, the various lines of traffic, external and internal, by which salt is supplied to the vast tracts throughout which the operations of our Department extend, or which are directly affected by these, the conviction has forced itself on me that, so far as the supply of salt to the people at large and the development of commerce generally is concerned, our present system is in one respect erroneous. It is in no spirit of foolish self-confidence that I suggest this. I am conscious that I am most probably more or less in error, but my duty, as virtually responsible for the supply of salt to sixty-eight millions of people, has compelled me to look into this matter somewhat closely, and think over it continually, and I am bound, it appears to me, to submit to Government frankly and fully the conclusions to which my observations and enquiries have led me.

Too much expended on minor channels and pleasure-roads, while the costly main lines we have are not of the right description.

97. Too much is, it appears to me, expended on minor channels, and wasted on what I can only call pleasure-roads, while our main lines, maintained at an enormous cost, are not, it appears to me, of the nature required.

Cross-country tracks everywhere converted into bridged and raised earthen roads at heavy cost, with little or no real advantage.

98. Cross-country cart-tracts, which for petty local trade answer perfectly as they are for nine months of the year, are converted at heavy cost into raised and bridged earthen roads (entailing a perpetually-recurring expenditure), which, during those seasons when trade is briskest and carriage is most available, not uncommonly, from their extreme heaviness, offer even greater obstacles to traffic than the simple and wholly costless lines they have superseded.

Hundreds of miles of metalled roads are wasted in the vicinity of stations and cantonments, and hundreds in localities where traffic is insufficient to warrant their maintenance.

99. Hundreds of miles of metalled roads are wasted (so far as the general interest of the country are concerned), in the immediate vicinity of stations and cantonments, apparently solely for the convenience of a few Europeans; hundreds of miles, again, seem to have been laid down along lines which meet no natural want of the country, and carry no traffic at all commensurate with the cost they entail.

Our main metalled roads rarely maintained in a high state of efficiency, and, even where they are so, cheapen carriage but little.

100. Our really main metalled lines, appear rarely* to be maintained throughout in a high state of efficiency, and, even if they were, after a vast and daily† growing expenditure, we should not, as far as all my enquiries go, have cheapened the cost of carriage by much more than one-third of a pie a mile per maund.

A limited number of main channels of a nature to cheapen carriage materially, with a few good feeders, preferable to our present system.

101. The absorption of local funds in multiplying minor internal communications is the natural error (in which I in my time fully shared) of the District Officer, but a more comprehensive view of the whole question, and a careful study during the past two years of the price-currents (not *only* of salt, I should note) of something like ninety districts, have convinced me that the interests of our national commerce, and necessarily, therefore, of the people at large, would be better consulted by maintaining a certain limited number of main channels, of such a nature as to cheapen carriage materially, with a few good feeders, than by our existing system.

Tramways are what we seem to require, and local and imperial resources should be concentrated on these.

102. What we seem to want (in localities where navigable canals are not practicable) are tramways such as those proposed by Sir Macdonald Stephenson and others, which will reduce the rate of carriage to at most half a pie per maund per mile. In the interests of the salt trade, and, indeed, of trade generally, I believe that our road system in Upper India needs re-casting. A certain number, the largest possible, of main commercial lines, with branches where necessary to leading marts, should be laid down as tramways and carefully maintained, throughout and at all times, in good repair, under a special provincial staff of really competent men. No metalled‡ roads, except as short feeders to link these tramways with important marts to which for any reason branches might not be extended, should as a rule be allowed, and no bridges built except for these tramways and their feeders, save in each case what municipal and cantonment funds could provide. To these tramways and short feeders I would devote, not only all available Imperial funds, but by far the greater portion of the local funds; and I would for the present unhesitatingly leave the local distribution of goods from the various leading marts to the ordinary cart-tracks of the country and such earthen roads as have been made (on which I would not expend another rupee), merely making the district authorities responsible that these are kept *open*, and *not* allowed to be, as the half of them commonly are, closed by raised watercourses led athwart them. Many existing metalled roads I would at once abandon as such, without replacing them by tramways. If any doubts existed as to the treatment of any particular line, two or three traffic-writers, posted at different points along it, would in twelve months set all doubts at rest. I would give up nine-tenths of the intricate network of metalled roads connected with most stations and cantonments: there is no essential necessity for these; they are luxuries, to which it seems to me we have no right in one locality, when in others we cannot afford to provide the people with the means of acquiring the barest necessaries at reasonable prices. Bridges and culverts, now sown broadcast over the land on hundreds of earthen cross-roads, often of doubtful workmanship, generally comparatively useless, I would absolutely give up building; confining such works to our selected main lines and their feeders, on which I would virtually concentrate *all* our resources, local and Imperial. Much that is now done is doubtless good and desirable in its way; but it is, it seems to me, of *secondary* importance. What we *first* want is to open out the whole country thoroughly for through traffic, and lengthened transport at *low* rates. It will be time enough when this is accomplished to give every pergunnah its cross-roads, and every petty mart its half-dozen feeders; for the present, local carriage and country roads suffice for local requirements and for short journeys.

* Witness the Bhurtpore and Agra Road, one of the most frequented thoroughfares in Upper India, which is never in the state it ought to be; at present it is in a condition by no means creditable to us.

† Kunkur is almost everywhere growing dearer and scarcer in the neighbourhood of old-established roads. In some places its cost has more than doubled within my experience.

‡ It may be thought that this would greatly interfere with passenger and mail traffic, but it must be remembered that light carts drawn by horses will run far easier on a tramway than on a metalled road and that by proper organization, the passage of the slow traffic by the fast, at given places, can be as easily arranged for on a tramway as the passage of goods by passenger trains is on railways.

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Such a system might be expected to develope trade largely without any increase of present expenditure.

103. I submit that under such a scheme, sketched out with due advertence to our railway system, the people at large, without any increased expenditure on the part of the State, would obtain not only their salt but nearly every article of trade cheaper and with greater regularity and certainty than they now do.

RATES OF CARRIAGE.

104. Minute enquiries have been made throughout the year, along the whole Line, into the cost of carriage to and from the Line to all the leading marts from or to which our exports or imports are drawn or sent. This question will be dealt with more in detail in the Divisional Reviews, but I may here mention that, speaking generally, the cost of carriage (by all means of conveyance, railways excepted) between any of our Line posts situated between the Sutlej and the Nerbudda, and any of the marts whose trade passes through these posts, is about nine-tenths of a pie per maund per mile for metalled roads, and about one and one-third pie for the rest. These are for distances of twenty miles and upwards, the cost being usually somewhat higher for short trips. Directly we cross the Nerbudda, we reach a country where carts are small, bad, and scarce (indeed plentiful and cheap carriage is *the* one essential still wanting to secure to the Central Provinces the fullest material prosperity); hence from the Nerbudda to the Mahanuddee, the cost of carriage from our Line posts to any marts inside the Line, averages at least two and a half pies per maund per mile, and in some localities falls little short of one anna per mile! All traffic from outside the Line in these parts is either by rail (the rates of which, one-third of a pie per maund per mile, are well known), or by Bunjara bullocks, the rates by which cannot be ascertained, the owners of the bullocks being invariably themselves the owners of, and traders in, the goods they carry.

CONSUMPTION.

Widely-extended enquiries have been made into this subject during the past year.

105. During the past year, every officer in the Department, high and low, has been engaged in prosecuting enquiries into the consumption of salt by men and cattle, in present and past times, and, in the case of Line officials, both within and without our cordon.

All reports on this subject reproduced in Appendix A.

106. The result of these enquiries, given in every man's own* words, will be found in Appendix A.

To many of the reports—containing as they do internal evidence of carelessness, insufficient enquiry, or failure to realize the real questions at issue—I attach but little value; considering, however, the conflicting opinions that have been and still are held on the subjects involved in these enquiries, it appeared to me that the only fair method of dealing with the matter was to reproduce *all* opinions and statements, however crude or (according to my views) erroneous, *without* exception.

In weighing this mass of evidence, the probability of a certain degree of bias not to be overlooked.

107. In weighing this mass of evidence, I must at the outset premise that absolute impartiality cannot be claimed for it as a whole. The reporters are Customs' officers, some of them necessarily more or less imbued with the long-standing Departmental axiom that our duty has been fixed at a natural and proper rate, and that no one suffers by it. Moreover, although as independent a body of gentlemen as could be met with, it is not in the nature of men to remain, one and all without exception, wholly uninfluenced by a knowledge of the opinions hitherto held, and often publicly recorded, by the Heads of their Department. Making, however, all allowances for such probable bias on the part of some of the writers, and rejecting manifestly unreasoning and inaccurate statements, there yet remains a mass of most valuable information, which will aid us, I think, to arrive at certain useful general conclusions.

Making, however, due allowance for this,

much useful information still remains.

The apparently contradictory nature of many of the statements forms *per se* no ground for discrediting them.

The circumstances of different localities vary so much, that officers,

108. The first thing that must strike anyone in perusing the evidence, is (even setting aside individual eccentricities) its extraordinarily contradictory nature. This must not, however, be hastily allowed to invalidate it. The countries affected by our operations present such extreme diversities—in soil, in the habits of the people and the nature of the food they consume, in the kind of fodder available for cattle and the

* Except when these were in the Vernacular; careful translations having been substituted in such cases.

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writing from different parts of the country, report on totally different states of affairs. Examples of this given. *One set of officers assert that every one complains of the price of salt, another, that no one does.*

But salt in the one division was selling at only four, in the other at eight, seers per rupee.

extent to which it is procurable, and in the prices at which salt can be obtained—that what may be absolutely true in one would be absolutely false in another. Thus, where the officers of one division declare that *no one* feels the pressure of the salt tax, and those of another that the people *all* complain of insufficient supplies, we must, instead of rejecting both sets of statements as unreliable, or, as is the usual practice, accepting those most consonant with our own preconceived opinions, consider carefully the circumstances of each division; when the fact that salt was selling in the one throughout the year at eight seers for the rupee on the average, and in the other at four seers only, will sufficiently explain the apparently fatal discrepancy.

In one division cattle are said not to suffer, in another to suffer, from getting no salt. The former contains saline soils and herbage, the latter does not.

109. Again, where in one division it is said that the cattle get *no* salt, and their owners say they require none, and yet look in equally good condition above and below Line, and in another, that the people resident near the Line periodically drive their cattle across it, out of jurisdiction, so as to give them a feed of untaxed salt, and further that the cattle below Line do not look in such good condition as those above (or outside) our cordon, the simple explanation is, that in the one patches of saline earth and extensive growths of saline herbs abound, while the other has nothing but rocks and black soil, where every particle of salt the cattle get must be procured for them.

One set report consumption at 4½, another at 6¾ seers per adult; but the one write of flour, the other of rice-eaters.

110. Again, where one set of men give about 4½ seers as the natural limit of the annual consumption of an adult male, and another set 6¾ seers, it must be remembered that the former live amidst a population eating wheat, barley, and jowar, and but very little vegetables and this but once a day, and the latter amongst people who consume chiefly rice and vegetables, and take two meals per diem.

Instances might be multiplied, but these will suffice to give an idea of how discrepancies often arise.

111. I might multiply examples almost indefinitely, for even neighbouring beats have in some cases marked peculiarities affecting consumption; but these will suffice to illustrate my meaning.

Some, especially amongst the younger European officers, have doubtless been misled.

112. Then, again, the little value attached to truth by the poorer classes of Natives has been a fruitful source of error, especially to our younger and less-experienced European officers. A man may have enquired very patiently, and have recorded very carefully, what was told him, and yet the result of his enquiries may be simply worthless. The intelligent Native who gravely assured one of our officers that salt was so dear that he had tasted none for six months, and proved later to have been twice convicted of smuggling during that period, affords an amusing warning against trusting too much to the results of mere *viva voce* investigations. All this has had to be allowed for, and the intelligence, experience, and character of each witness considered, in estimating the value of his evidence.

This, as well as the comparative intelligence and experience of each officer, has been allowed for in weighing the evidence.

A special difficulty that our officers have had to contend with (and which the majority have failed to appreciate) in estimating the relative consumption of taxed and untaxed salt, is, that these do not meet sharply *on* the Line, but shade gradually the one into the other through the 15 miles belt of jurisdiction.

113. A considerable proportion of our officers state the consumption above and below Line (that is to say, *outside* and *inside* our cordon) at precisely the same amount. It is necessary to explain that in most places our jurisdiction extends 7½ miles on either side of the Line, and that it is with the country within jurisdiction alone that our officers have any official concern. It is, consequently, to this country exclusively that many of our officers' remarks apply. Taxed and untaxed salt do not, as a rule, *meet* on the Line as a sharply-defined boundary; by a very wise arrangement, the whole 15 miles forms in most* localities a tract of fusion in which the one shades off gradually into the other. People resident inside the Line are at all times allowed to cross it and bring back with them small quantities, not exceeding one† seer, for personal consumption, without payment of duty. The masses, therefore, of the poorer classes in

* There are some exceptions to this, where, as at Jhansie itself, Native territory—in which we have no jurisdiction—runs close up to the Line.

† In the neighbourhood of a few large cities, where people began to make a trade of it, marching out daily with large troops of children, each of whom returned bearing a seer of salt, this quantity has been reduced to one-quarter of a seer.

many* beats resident inside and within some few miles of the Line, use untaxed salt only. Outside the Line, again, within jurisdiction, no one may have more than five seers of untaxed salt. Buneeahs and others, therefore, have to pay duty on all they sell. Persons may fetch for their own private consumption untaxed salt in quantities not exceeding five seers, from beyond jurisdiction; but they may not sell it. The result of these rules is that the difficulty of procuring salt only gradually grows through the fifteen miles' belt of jurisdiction, and does not usually make any sudden jump at the Line itself, or present a harsh contrast to the people of the state of affairs inside and outside our Line. This, however desirable in itself, must necessarily diminish materially the opportunities of many of our officers for judging of the results due to the imposition of the salt tax. The tract of country in which all their work lies is, where most Line officers are concerned, one of transition, in which neither the full pressure of the tax, nor the full advantages of the absence of the tax can, as a rule, be observed.

GENERAL CONCLUSIONS WHICH OUR PRESENT INFORMATION APPEARS TO WARRANT.

114. I proceed now to state briefly the conclusions which a careful analysis of the matter contained in Appendix A., combined with such information as I have elsewhere acquired, seem to me to necessitate. These are put forward in no dogmatic spirit; further researches may lead me to modify one or all of them more or less; they merely claim to be an impartial verdict on the case, *so far as I have been able to master its facts*:—

Men.

I.—That, while a comparatively small† quantity of salt suffices to maintain human beings in perfect health, they will, by preference and without injury, consume a much larger quantity than is absolutely necessary to health, if they can readily procure it.

II.—That the minimum required for health, and the maximum that will be voluntarily consumed where the price of salt is no object, will both be greater amongst vegetable and rice-eaters than amongst flesh, wheat, and barley-consumers, and will also both be greater in humid than in dry and arid localities.

III.—That our rates of duty have in no situation and amongst no class of people so affected consumption as to reduce it below the minimum necessary for the maintenance of health.

IV.—That, consequently, the reduction of these rates is a question not so much of moral obligation as of fiscal policy.

V.—That in tracts of country devoid of saline‡ soils, the amount by which consumption exceeds the minimum necessary for health depends, up to a certain maximum, on the price of salt and the means of the people.

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* This rule is not invariable, because when a man carrying salt reaches the Line, he has to march along it to the nearest officer's post, officers alone being empowered to pass these small quantities free where population is dense and beats short. This gives a man little trouble, and the lower-classes easily get their salt free; but where beats are long it *may* entail a ten miles' walk to the headquarters and back again, and in such places it is almost cheaper to buy taxed salt. Again, lay rules of this nature down as precisely as you may, where a number of precautions have to be insisted on, the manner of enforcing the rules, which must rest with the local executive, will materially affect the results; and it may happen that in one beat, where an officer is very strict and zealous, little but taxed salt finds its way into consumption within jurisdiction *either* within or *without* Line, while in the next, where an officer is rather lax or very liberal in the interpretation of the rules, the exact reverse may be the case.

† The jails of the North-Western Provinces, &c., have proved that where flour is the chief food about 5¼ lbs. per head is sufficient, but in other jails, especially where rice is chiefly consumed, the quantity sanctioned is fully double this amount. Where rice forms the chief staple of consumption, *less* than 8lbs. per head for adults is not, I think, sufficient to keep them in good health.

‡ The presence of extensive saline deposits does seem in some way to reduce the avowed consumption of the neighbouring country. This is very striking in the immediate vicinity of the Sooltanpore and Bhurtpore works, Sambhur, and other sources. In the heart of the Bhurtpore works, where salt is cheapest, the quantity asserted to be consumed does not apparently exceed what is consumed in many of our intra-Line districts where it is eight or ten times as dear, and falls *very far* short of what is reported as the consumption of other non-saline extra-Line tracts, which, so far as climate and food-staples go, appear to differ from them in no material respect. I do not pretend to explain this. It may be due to the people imbibing salt insensibly in the more or less brackish water usually characteristic of such localities, to their consuming it in pot-herbs, or absorbing it from the atmosphere; or it may be due to systematic fraud on the part of the inhabitants resident in such localities, who, procuring much of their salt from illicit sources, are unwilling to avow their real consumption, just as we find people living near the Line in notoriously smuggling beats affirm that they hardly ever touch salt at all. But be this as it may, the fact of the apparent smallness of consumption at the very places where salt is cheapest remains the same.

SUPPLY AND PRICE OF SALT.

VI.—That, as the masses resident within our Line in Upper* India are uniformly poor, and as our duty constitutes in Upper India on an average fully two-thirds† of the difference between the price of salt in countries outside and within a hundred miles of the Line (excluding the sources and their immediate vicinity), and the country inside the Line, fully two-thirds of any difference observable in the consumption of similarly-circumstanced localities in these two countries (if I may use the term) is due to our duty.

VII.—That, excluding the salt-sources and their immediate vicinity, the *average* consumption of adults in the belt of country extending for 100 miles outside our cordon, where untaxed‡ salt is available is certainly§ not less than 13lbs. per adult and probably materially‖ exceeds this amount.

VIII.—That, both by actual enquiry¶ and by reference** to population and supplies, it is proved that the average consumed by adults within Line cannot exceed 8lbs.

IX.—That, therefore, of this difference of at least 5lbs., or 62·5 per cent., *fully* two-thirds (or nearly 42 per cent.) is due to our duty.

Cattle.

X.—That, where cattle are concerned, although salt may not under many circumstances be absolutely necessary to maintain them in health, it *is* commonly requisite if good condition or fatness is to be aimed at; and it is, moreover, to a certain extent *necessary* to all hard-worked animals, to those obtaining only poor and indigestible fodder, to those that are sick, to those subjected to a sudden change (as at the commencement of the rainy season) from dry grass-roots and chopped jowar-culm to juicy and luxuriant herbage, and to those giving milk.

XI.—That in large portions†† of Upper India, where saline patches of soil and saline herbs abound, these, and the brackish water so common throughout such tracts, remove to a great extent the necessity for direct administration of salt; and that consequently, in these tracts it has never at any time been customary to give salt to grazing cattle, which constitute the majority (say three-fourths), except, perhaps, in small quantities at the "Dewallee"‡‡ as a religious observance, at the commencement of the rains as an alterative, or as a medicine when sick; while even to draught or other hard-working§§ cattle comparatively little was ever given.

XII.—That, where natural sources of supply are generally wanting,‖‖ even grazing cattle used habitually from time to time to receive salt, while working-cattle and milch-cows received it regularly, and in considerably quantities.

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* I include the Central Provinces, but exclude Bengal.

† It may be said that the comparison should be drawn with the actual sources, in which case the difference would vary from two to four-fifths, and average rather more than three-fifths. But, as I have noticed in a previous note, the consumption in the vicinity of the sources *appears* abnormally small.

‡ Even where half-taxed salt is the staple, it will be observed that where rice is the chief food-stuff, many officers put it at a higher figure.

§ It will be seen that no less than thirty of our Line officers, including several of the oldest and most experienced Europeans and *all* the ablest Natives, put the consumption, even of the above-Line country which is within jurisdiction, at over 12lbs. per adult. It may be said that many of these give the consumption below Line at the same figure; but, as already explained (para. 113), the country below Line to which they refer is within jurisdiction, where, in many beats, the poorer classes chiefly consume untaxed salt.

‖ It will be noticed, here and elsewhere, that the views now expressed differ to a certain extent from those record d on former occasions. When I assumed charge of the Department in July, 1867, anything like comprehensive enquiry into these matters, or the collation and analysis of extensive series of facts relating to them was unknown. I can only collect facts and reason on them; and, from time to time, as materials grow under my hand, submit such conclusions as they seem to me to warrant.

¶ The average of 102 reports as to consumption below Line is 4·49 or say 9lbs., but this total is swelled by the many estimates derived from below-Line portions of beats in which much untaxed salt is consumed within jurisdiction.

** *Vide* para. 34.

†† Under this head may be included the greater portion of the Punjab, Oudh, and the North-Western Provinces north of the Jumna, besides Banda and Humeerpore, and certain portions of the Central Provinces, *e. g.*, the country in rear of the Nagpore Line.

‡‡ In many places, however, it was also given at the "Holee," and in others on "*Punchumee.*"

§§ Camels, however, which seem to need at certain seasons very large doses of salt, are an exception to the rule, and people who keep large numbers of these in Bhutteeana and Hurriana always now, if resident inside the Line, take them outside it when they need salt. Owners of one or two riding camels *may* afford to buy taxed salt for them, but those who have large herds of baggage-animals cannot possibly do so.

‖‖ Under this head, I should include the Jhansie Division of the North-Western Provinces, and those portions of the Central Provinces in rear of the Saugor and part of the Hoshungabad Divisions.

XIII.—That, where natural sources exist, the imposition of our duty, though it has doubtless diminished the amount of purchased salt given to them, has not perceptibly affected the condition of the cattle, natural sources having been more extensively utilized, and cheap earth-salts,* other than pure chloride of sodium, having been substituted for this; but that, where such sources are wanting, especially where salt is dear from causes independent of our duty, the imposition of this latter has so far curtailed the allowance of salt they receive, that the mass of the cattle, the property of the poorer classes, *are* decidedly in somewhat† worse condition and give less milk below than above‡ Line.

XIV.—That, while out of the thirty-four millions of horned-cattle, horses, and camels estimated as living in the North-Western Provinces, Oudh, Central Provinces, and the Punjab, the condition of, at the outside, not above two millions has been perceptibly§ affected by the rate of duty now levied on all salt consumed in these Provinces, the consumption of purchased edible salt by cattle has actually decreased most seriously.‖

XV.—That my former estimate of a probable increase of nearly 25 per cent. in consumption, as the consequence of reducing our Rs. 3-duty to the Bombay and Madras rates of Re. 1-8-0, is certainly below the mark, and cannot, in the present state of our information, be fairly taken at less than 30 per cent.; while, supposing the effects of such reduction to be combined with those of the measures already sanctioned (paragraph 84) and now proposed (paragraphs 92 and 95) for facilitating the distribution and cheapening the cost of carriage of salt, the combined result would probably ultimately be an increase of not less than 40 per cent.

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* In many parts of the country the so-called *kharee* or sulphate of soda contains 50 per cent. of edible salt, and not above 15 or 20 per cent. of the sulphate, and sells from 15 to 20 seers for the rupee. In these localities, this impure kharee is largely used for cattle. The pure kharee is a strong purgative, and is, therefore, only used for cattle as a medicine, and in small quantities. *Kanch noona*, another impure salt, made in glassworks, is also given in many places; it goes also by the name of "*choorree*," and "*muniharee*" salt, and contains chiefly sulphate and chloride of sodium, the latter on the average of six specimens analysed to the extent of 42·5 per cent. The well-known saline efflorescence *reh*, which varies so much in chemical composition in different localities, is in some chiefly chloride of sodium, and in some chloride and sulphate in nearly equal parts. In such places *reh* is given to cattle. Of course in districts where the *reh* is chiefly composed of carbonates, or contains much magnesia or lime, it cannot be thus used.

† Of this ample evidence will be found in Appendix A., under the Jhansie and Saugor Divisions. Mr. McMullen at Chirgaon, Mr. Graham at Bubeena, Mr. Dutton at Talbehut, Mr. Bachman at Bansee, Mir Massoom Ali at Lullutpore, Oolfut Hoosein at Goonah, Mr. Baness at Saugor, Mr. Tritton at Paloha, and the Sub-Assistant in charge at Omerdha, all dwell more or less on this matter. It is impossible to doubt such a mass of concurrent testimony, opposed as it is to all the traditions of the Department, and to the opinions which, relying on my personal investigations from the banks of the Sutlej to the junction of the Jumna and Chumbul, I last year recorded. Besides, Messrs. Dutton, Baness, and Mir Massoom Ali, are three as intelligent and experienced officers as the Department contains. That people here do feel the loss their cattle sustain is clear from the fact, that those resident anywhere near the Line, periodically drive their herds across the Line out of jurisdiction, to give them a feed of untaxed salt. To this fact, almost every officer in both divisions (including many who do not notice the difference of appearance in the cattle above and below Line) bears witness.

‡ The great difficulty always is to eliminate differences of pasture; it is useless giving salt, nay injurious, when the supply of other food is very small, or where water sufficient to keep the cattle alive (as has been the case this year in many parts of Rajpootana) can scarcely be obtained. Salt stimulates digestion, but this is absolutely injurious when animals have little or nothing to digest, and it makes them desire to drink more, a thing most advantageous to milch-kine especially, but worse than useless where water is only procurable in small quantities. The mere giving salt will not improve the condition of cattle if fodder cannot be had in reasonable quantities; nor will it make cattle who have little or no fodder, or bad pasturage, thrive as well as others who, though they may get no salt, have plenty of good food. All that we can say is, that where the *quantity* of fodder is not stinted, there cattle feeding on similar qualities will thrive much better with than without salt, and that this is peculiarly the case with working-cattle, amongst whom it is desirable that the earlier processes of digestion should be somewhat rapidly carried on, so that they may not have to work hard on what in every-day parlance is termed a full stomach.

§ I say perceptibly because many zemindars (without accusing the Salt Laws of being the cause) say that the breed of cattle in Upper India is deteriorating. Salt *may* have had something to do with this; but I incline to believe that it results from the increased breadth of cultivation, and the vast diminution in pasture lands which has resulted from our improved administration.

‖ No really reliable estimate can be made of the extent of this decrease. Outside our Line, six seers per annum a-head are in many places given to draught, plough, and pack-bullocks, and much more to camels. Even within Line, it appears that in some parts of the country as much as this is now given by wealthy men to bullocks that they take a pride in, and three seers per annum is commonly given *by those who can afford it* to draught-oxen. We shall be, I believe, quite within the mark if we assume that if salt was everywhere throughout the Provinces with which we are concerned reduced in price by Rs. 3 a maund (the amount of our duty), when it would average 20 seers per rupee, and measures were taken to awaken the people to the advantages of giving a certain amount of salt to all their cattle, that the average consumption would not be less than one seer a-head for three-fourths of the cattle, and three seers for the remaining one-fourth. This would increase cattle-consumption from 17 (as now estimated) to 102 millions of lbs., and increase our total consumption by fully 18 per cent. A reduction of our duty by one-half ought, therefore, to give an increase of 9 per cent for cattle, and, according to conclusion IX., 21 per cent. for human beings, on the present total consumption.

SUPPLY AND PRICE OF SALT.

XVI.—Lastly, that throughout the greater portion of Upper and Central India within Line, the people do not appear conscious* of any pressure, either where they themselves or their cattle are concerned, resulting from the Salt Laws, and do not, unless the idea is suggested to them, complain of the price of salt; but that, in some localities where salt is exceptionally dear, and where the former supplies to cattle have been much curtailed, and other substitutes are not available, they *do* complain bitterly of the dearness of salt.

PENAL ACTION OF THE DEPARTMENT.

115. Turning, now, to administrative details, the penal action of the Department has first to be noticed.

Principles by which that action is guided.

116. During the past year, the maxims that I laid down for the Department, *viz.*, that we should endeavour to realize the largest possible revenue for the State with the least possible suffering and inconvenience to individuals, and that we should confine criminal prosecutions rigidly to the cases of persons who have, *beyond doubt*, *knowingly* and *wilfully* violated the laws, have, I believe, been honestly acted up to by the great majority of our officers. The result has been that in almost every section and branch of the Department the percentage of convictions on committals† (a very valuable test) has increased.

Increase in the percentage of convictions on committals.

117. In the Punjab Section of the Line it has increased from 89 to 94; in the North-Western Provinces, from 90 to 94; and in the Central Provinces from 96 to 97⅓. In the Internal Branch, again, it has risen in the North-Western Provinces from 67 to 76½,

* I myself (but, then, I have not been in the very divisions where our officers for the most part report such to be the case), have *nowhere* found the poorer classes, who have to bear what pressure there is, *themselves* alive to there being any hardship in our existing rate of duties, or to the fact that they use less salt than they would do were this article much cheaper. At one time this seemed to me an unanswerable argument against believing that our duty was too high, or was materially checking consumption. The more, however, that I have considered the matter, the less satisfactory does this conclusion appear to me. The masses are ignorant and childlike; prices have long since reduced consumption to a certain limit; the people get now quite as much salt as is *necessary* to keep them in good health—fully as much as they have ever been in the habit of getting for the last ten years, and probably where railroads have cheapened salt a good deal more; and they reasonably enough, therefore, say that they get as much as they want. Natural sources are so common in Upper India that the herdsmen have never been fully alive to the advantage of *giving* salt to their cattle; and these, what with cheap impure earth-salts, salt-licks, saline herbage and brackish water, manage in most places to pick up quite enough to prevent serious deterioration. Naturally enough, therefore, it is only where salt is exceptionally dear, or where the cattle can get no salt but what is given them, or where the duty has been very recently imposed (as in Berar), or where, owing to foreign territory running close up to the Line, taxed and untaxed salt are brought directly face to face, that the common people would feel or complain of the salt tax. But all this in no way proves that the cattle do not get less than is good for them; that the people would not use twice as much as they do if salt were very much cheaper; that consumption has not been materially checked; or that our duty may not be too high, and may not even fiscally be a mistake. I assert none of these things; but there is nothing in the fact of the masses being wholly unconscious of any pressure from, or making no complaints against, our high rate of duty to disprove any of them.

† RESUMÉ OF PROCEEDINGS IN THE CRIMINAL COURTS.

Branch.	Section.	Number of Persons detected in breaches of the Customs Laws.		Number of Persons Released by Department.		Nnmber of Persons committed for Trial.		Number of Persons Acquitted by the Courts.		Number of Persons Convicted by the Courts.		Percentage of Convictions on Committals.	
		1867-68.	1868-69.	1867-68.	1868-69.	1867-68.	1868-69.	1867-68.	1868-69.	1867-68.	1868-69.	1867-68.	1868-69.
Line.	Punjab, ...	116	336	28	155	88	181	10	11	78	170	89	93·92
	North-Western Provinces, ...	1,286	1,512	1,020	1,081	266	*a*431	26	25	235	396	90	94·06
	Central Provinces, ...	1,745	1,756	972	850	773	906	31	24	742	876	96	97·33
	Total ...	3,147	3,604	2,020	2,086	1,127	1,518	67	60	1,055	1,442	94	96·07
Internal.	North-Western Provinces, ...	1,547	1,371	343	526 } *b*13 }	1,204	*c*832	390	174	789	566	67	76·48
	Oudh, ...	1,035	1,256	439	642 } *b*15 }	596	*d*599	63	93	496	486	89	83·92
	Total, ...	2,572	2,627	772	1,196	1,800	*e*1,431	453	267	1,285	1,052	73	79·76
	Grand Total,	5,719	6,231	2,792	3,282	2,927	*a*2,949	520	327	2,340	2,494	82	88·4

a Pending cases, 128. *b* Pending. *c* Pending, 92. *d* Pending, 20.

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and in Oudh alone it has fallen, from 89 to 84. The percentage for the whole Line is 96, and for the Department, as a whole, it is 88½. In no other class of judicial committals in the country does the percentage of convictions appear to reach anything like so high a figure.

118. That only 4 per cent. of the 1,518 persons committed by our Line officers escaped conviction before the Criminal Courts is, it appears to me, most satisfactory. Accidents, it must be remembered, are always liable to occur. There are so many causes (unavoidable when large numbers are dealt with) for the failure of the most unexceptionably good cases—the sudden death or absence on account of sickness of a principal witness—the occasional stupidity of even honest witnesses, leading the Courts to distrust their evidence—the subornation of plausible false evidence—the eccentric interpretations of the law now and then adopted by inexperienced magisterial officers, &c., &c.; and when, including cases that have failed from these and similar mischances, altogether only 4 per cent. out of 1,500 cases are lost, the result cannot but be considered highly creditable to the committing officers as a body.

Considering the unavoidable accidents that lead occasionally to the failure of good cases, the acquittal of only four per cent. of the persons prosecuted by our Line officers is satisfactory.

119. Every case of acquittal during the year has been called for, and examined by this Office; and in every case in which a committal appeared to have been injudiciously or wrongly made, an explanation has been called for from, and due admonition given to, the committing officer. These cases, however, did not much exceed one per cent. of the committals, which, in the other three per cent., failed from causes for which our officers were not responsible.

Every case of acquittal has been carefully reviewed by this Office. Erroneous committals scarcely exceeded one per cent.; the acquittals in the remaining three per cent. of cases arose from causes beyond our officers' control.

120. I last year fully explained the difference in the nature of the Line and Internal cases, and the reasons for the far greater percentage of failures in this latter class of cases, and I need not here repeat what I then said; but I must note that, making all allowances, I do *not* consider even the percentage *now* attained in the North-Western Provinces Section of the Internal Branch quite what it should be, and I look confidently forward to improvement here.

The great difference in the nature of the cases prosecuted by the Internal Department accounts for the smaller proportion of convictions to committals in this Branch.

121. There is no doubt that, administered in the spirit the Department now is, the number of our prosecutions ought to diminish, and in the Internal Department they have done so most materially, but where the Line is concerned, special causes have interfered to prevent this; and, taking the Department as a whole, there has been a slight increase, and 2,494 persons have been prosecuted to conviction in 1868-69, against 2,340 in 1867-68.

Administered as the Department is, prosecutions ought to diminish. They have done so in the Internal Branch, but on the Line special causes have prevented this.

122. On the Line, 1,518 prisoners were committed, against 1,127 in the previous year, and the percentage of convictions having risen, the increase in these is even greater. There were two distinct causes for this increase. In the first instance, and this is the chief cause of the increase, a much greater proportion of the smugglers who attempted to evade the law were captured in the past than in *any* preceding year. Out of the bearers* of 4,509 head-loads of contraband goods seized in 1868-69, 2,839, or 63 per cent., were captured; while out of the bearers of 4,712 head-loads of contraband goods seized in 1867-68, only 1,918, or 40 per cent., were arrested.

Line.
Excess in Line prosecutions is chiefly due to an improvement in the proportion of smugglers captured to attempts at smuggling made.

123. This remakable improvement in the percentage of captures is due to the improved position of the men. In the first place, now that they obtain fair salaries their places are worth retaining, and they are willing to exert themselves. Under the old scale of pay it was difficult, and in some divisions almost impossible, to keep the establishment up to their work; on the slightest fault being found, they threw down their badges and disappeared. In the second place, the men formerly only got one

This improvement in captures due to the improved position of the men and the greater inducements held out to them to exert themselves.

* *Vide* Statement E.

rupee for each smuggler they captured; now they receive half the fines imposed by the Courts: under the former system, even when they caught a smuggler redhanded, a *douceur* of a rupee often secured his* release; now it is better worth the men's while to keep every man they catch, as well as to try and catch every smuggler they possibly can.

The scarcity has also led to a certain increase in smuggling in some divisions.

124. The second and minor cause was, that in all the divisions of the Punjab and North-Western Provinces, and most notably so in Jhansie, the great scarcity, I might almost say famine, led some men to smuggle who had never previously dreamt of such a thing; while in Jhansie (where, indeed, the pressure for food was severest) the very high price at which salt was selling inside the Line further stimulated illicit trade.

Increase in Line prosecutions, its causes considered, not unsatisfactory.

125. On the whole, therefore, the large increase of Line prosecutions, though undesirable abstractedly, is, except so far as the famine effected, the result of improved organization, and, *pro tanto*, satisfactory.

Internal.

Great decrease in prosecutions.

Formerly all breaches of the law, however petty, were prosecuted.

126. In the Internal Branch there has, on the other hand, been a vast reduction in the number of prosecutions. Previous to 1867-68, every case of illicit manufacture, no matter how petty, was prosecuted; our jails were filled with prisoners, and much of the time of the District Courts and of our officers was consumed in these trials.

On general grounds some relaxation of the rules appeared desirable, and this was recommended and sanctioned.

127. It appeared to me on general grounds that any moderate sacrifice of revenue would be preferable to this wholesale resort to the Criminal Courts; and, on my recommendation, the Governments of the North-Western Provinces and Oudh were pleased to authorize such a relaxation of the rules as relieved us from the necessity of prosecuting in petty cases, while at the same time power was reserved to us to refuse fresh licenses to parties who, though not prosecuted, had rendered themselves amenable to the law.

A reduction of 66 per cent. in prosecutions has resulted,

128. The result of this relaxation has been to reduce the prosecutions of the Internal Department from 4,277 in 1866-67 to 1,800 in 1867-68, and 1,431 in 1868-69.

though rather more licenses have had to be refused.

129. To prevent serious loss to Government, it was necessary during this past year, the first subsequent to the introduction of the new system, to teach the people who had transgressed the law that, though not dragged before the Criminal Courts, they were yet not to escape all punishment for their misconduct, and hence a good many licenses were refused, a bad thing *per se*, but necessary at first starting.

Even if the recently introduced relaxations have slightly increased the supply of illicitly-manufactured salt, the gain to both the Government and the people greatly exceeds any possible loss.

130. As regards the measure itself, though vehemently condemned by Mr. Hay, and disapproved by some few other Customs' officers, I entertain no shadow of doubt, that it has been beneficial in a high degree. If, for argument's sake, we admit that illicit manufacture has been slightly stimulated, and say 15,000 maunds extra (and no one except† Mr. Hay pretends that this amount has really been reached) of untaxed salt thrown into consumption, the loss to Government would be Rs. 45,000 in duty. *Per contra*, 2,850 persons less have been prosecuted. Reckon up the cost to Government, of maintaining three-fourths of these in jail for periods of from one to three months each; of the time of the judicial officers absorbed in trying these cases, of our officials in prosecuting them, attending trials, &c. Take, again, the loss to the country of the industry of these men while under trial and in jail, and of all the witnesses (often a dozen in a single case) attending at Court on one side or the other. I submit that Rs. 45,000, would be a cheap price at which to compound for all this.

* Although this was well known, it was seldom such offenders could be punished. Captured, as many smugglers are, by a single peon in a dark night, after a long run, no one but the captor himself and the smuggler could say whether a capture had really taken place.

† *Vide* paras. 25 and 30, Appendix II.

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No grounds, however, appear to exist for believing that the illicit manufacture has increased.

131. But, as a matter of fact, I can discover no grounds for believing as yet in any material increase in illicit manufacture. Although we have ceased in many cases to prosecute, we have not ceased to *search* for and seize illicitly-made salt wherever we can find it, in any quantities however large or small. If, then, illicit manufacture has increased, the number of *seizures* ought to have increased; our men are better disciplined, better trained, far better paid* than in former times, and they are stronger in numbers in many circles, and have more well-paid Native officers to supervise them. But there has been apparently no increase in seizures. There were in—

1865-66.	1866-67.	1867-68.	1868-69.
2,026	1,798	1,075	1,303

Even if it be admitted that the far greater number of crude saltpetre works open in the first two years prevents a just comparison with these, it must be also remembered in comparing 1867-68 and 1868-69, that the former was an exceptionally wet year, in which all manufacture, licit or illicit, of earth-salts of every kind, was for lengthened periods impossible; while the latter was an unusually dry one, in which this manufacture continued unaffected almost from first to last. My deliberate opinion is, that as yet there are no grounds for believing that Government has suffered one whit by this relaxation, which, so far as I can yet judge, is proving itself an unmixed benefit to both the people and the State.

132. In all fiscal systems there is a limit, beyond which increased stringency produces no net increase of realizations in any way adequate to the increased annoyance to which the public are subjected. I am by no mean sure that even now we are not overstepping that limit both in the Internal and Line Branches. On the Line, the excessive frequency of petty prosecutions in the Raipore Division has led me to recommend there most important relaxations of our rules, which have received the sanction of the Central Provinces Government; and, should no evil result, I shall be inclined to recommend the extension of this measure to some at least of the other divisions. It is needless, however, to remark that, differing as do the dispositions of the people, the density of population, and the physical aspect of the country, in the various provinces traversed by our long† Line, sweeping changes are always to be deprecated; while, considering the great interests at stake, even local reforms of any importance must be proceeded with slowly and cautiously.

Limit in all fiscal systems beyond which increased stringency produces no adequate financial results. It seems possible that we are still overstepping that amount in both the Line and Internal Branches.

Important relaxations recently recommended and sanctioned on the Raipore Division of the Line, which may hereafter be extended to other divisions.

Great caution, however, necessary.

133. Of the persons convicted‡ 1,577 paid fines, and 917 underwent imprisonment.

Convictions by the Criminal Courts.

* And this on the Line, as we have seen, has resulted in a large increase in seizures.

† 2,102 miles in length.

‡ DETAIL OF CONVICTIONS.

	Line.				*Internal.*			Grand Total.
	Punjab.	N.-W. P.	C. P.	Total.	N.-W. P.	Oudh.	Total.	
Paid fines, ...	79	156	643	878	355	344	699	1,577
Underwent imprisonment,	91	240	233	564	211	142	353	917
Total, ...	170	396	876	1,442	566	486	1,052	2,494

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Fines.

134. The total amount of fines* paid was Rs. 16,961, chiefly, as will be seen, in small sums—the fines in 1,013 cases having been less than Rs. 10, and having exceeded Rs. 50 in only 31 instances. I am the last to advocate undue severity, but, when it is borne in mind that nine-tenths of the prisoners belong to the lowest classes, to whom a month's imprisonment is a matter of no consequence, and that more than three-fifths of these paid fines in preference to going to jail for periods which *averaged* about eighteen days, it is difficult to avoid the conviction that, taken as a whole, the fines imposed were scarcely adequate punishments.

Reasons for believing that, on the whole, they are scarcely adequate.

Imprisonment

135. Of the persons who underwent imprisonment rather more than eight-ninths were confined for periods of less than three months, and two-thirds for periods not exceeding one month.

In one-fourth of the cases without labour.

136. In 214 *Line* cases, or in about one-fourth of the whole number, the persons who *underwent* imprisonment were sentenced to simple imprisonment only. In many of these cases (in fact, in all those which I was able to examine) I could see no reason for excusing the persons convicted from labour. It appears to me an entire mistake to sentence common smugglers of the classes we have to deal with on the *Line* to simple imprisonment for short terms. In some divisions, however, this is the rule; and in Saugor, according to the returns, 158 persons were imprisoned *without*, and only 58 with, labour! In this same division 20 prisoners were imprisoned *without* the alternative of the payment of a fine being given them—to my idea quite illegally; and one smuggler, in Jhansie, if records *can* be believed, was "punished with ten lashes only!" These, however, are exceptional cases; and it would be most unjust were I to fail to acknowledge the *care*, *patience*, and *promptitude* with which the Courts throughout Upper and Central India have tried the numerous cases we have had to bring before them.

Simple imprisonment in such cases useless as a punishment.

Some few sentences apparently illegal.

On the whole, the action of the Courts most satisfactory.

137. Numerous, however, as these cases were, and few as were the persons prosecuted who escaped conviction, the aggregate amount of punishment inflicted by the

Aggregate of punishments inflicted by the Criminal Courts by no means large.

* Detail of Fines Paid.

Branch.	*Above Rs. 50.*		*Below Rs. 50, and above Rs. 30.*		*Below Rs. 30, and above Rs. 20.*		*Below Rs. 20, and above Rs. 10.*		*Below Rs. 10.*		Total.	
	Number of Persons.	Total of Fines.	Number of Persons.	Total of Fines.	Number of Persons.	Total of Fines.	Number of Persons.	Total of Fines.	Number of Persons.	Total of Fines.	Number of Persons.	Total of Fines.
		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.
Line, ...	15	1,775	43	1,545	55	1,354	206	1,818	559	3,378	878	9,870
Internal, ...	16	1,278	14	595	50	1,050	165	1,873	454	2,295	699	7,091
Total, ...	31	3,053	57	2,140	105	2,404	371	3,691	1,013	5,673	1,577	16,961

Detail of Imprisonments undergone in Default of Payment.

Branch.	*For six months.*	*Below six months, and not less than three months.*	*Below three months, and not less than two months.*	*Below two months, and not less than one month.*	*Below one month, and not less than fifteen days.*	*Below fifteen days, and not less than ten days.*	*Below ten days.*	Total.
	Number of Persons.	Number of Persons.	Number of Persons.	Number of Persons.	Number of Persons.	Number of Persons.	Number of Persons.	Number of Persons.
Line, ...	13	33	80	215	157	38	28	564
Internal, ...	8	46	90	138	58	3	10	353
Total, ...	21	79	170	353	215	41	38	917

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Courts was anything but excessive; and, if the leniency generally exhibited* does not encourage violations of the law, we may justly congratulate ourselves on being able to enforce so vast a fiscal system at the expense of such light punishments.

The double punishment to which offenders are liable, 1st, before the Criminal Courts, 2nd, under the orders of the Revenue authorities, accounts in great measure for the general lightness of the sentences of the former.

138. One thing which often influences their decisions has to be borne in mind in weighing the sentences of the various Courts, *viz.*, that a two-fold punishment awaits most offenders—fine or imprisonment awarded by the Criminal Courts, and confiscation (under the orders of the Revenue authorities) of the goods which it has been attempted to smuggle.

Confiscations under the orders of the Revenue authorities.

139. As will be seen,† altogether goods to the value of Rs. 31,051 were confiscated during the past year, mostly the property of persons prosecuted, but, in some cases that of offenders for whom the confiscation of their investments seemed a sufficient punishment.

Increase in confiscations chiefly due to increased vigilance.

140. The increase noticeable in the quantity and value of goods confiscated during the past year is due mainly to the increased vigilance of the men; but is also in some measure attributable to an increase in smuggling in the Raipore Division consequent on the weakness of the Line, and in some other divisions owing to the famine.

Double duty and minor penalties *have decreased.*

141. Besides confiscations, which are only resorted to in cases of open and manifestly wilful and fraudulent violations of the law, minor penalties in the form of extra duty are imposed. These minor penalties amounted to less than Rs. 9,000 in the year under report, against Rs. 30,000 in the preceding year.

Decrease confined to Central Provinces.

142. This decrease is exclusively in the Central Provinces, and more than Rs. 16,000 of it in Raipore, and is due chiefly to the steady support received during the last two years from the Revenue authorities, which has convinced the traders, apparently much against their will, that they cannot break the law with impunity, no matter how plausible a scheme they concoct.

When and how levied.

143. I should, perhaps, explain when and how these minor penalties are enforced. Cases often occur (very commonly I fear carefully got-up schemes) in which, although excellent grounds for inferring fraudulent intent exist, it is still just possible that they may have originated in the stupidity of servants or *bonâ fide* ignorance. In such cases no prosecution ensues, and no confiscation is pressed for; but since to pass them wholly unpunished would render our administration impossible, minor penalties of from a fine of one rupee up to a levy of double duty on the whole despatch are recommended.

* This was natural, and perhaps only right, in a year of great scarcity like that under review.

† DETAIL OF GOODS CONFISCATED AND ON WHICH DOUBLE DUTY WAS LEVIED.

Period.	*Confiscated.*						Total value of Confiscations.	*Double Duty.*						Total of Extra Duty so levied.
	Salt.			Sugar.				Salt.			Sugar.			
	Cases.	Quantity.	Value.	Cases.	Quantity.	Value.		Cases.	Quantity.	Amount of Extra Duty so levied.	Cases.	Quantity.	Amount of Extra Duty so levied.	
1868-69, ...	2,155	4,097	27,101	99	511	3,950	31,051	717	1,796	6,929	869	2,110	1,880	8,809
1867-68, ...	1,301	3,555	20,896	116	178	932	21,828	782	7,518	28,172	1,085	2,628	2,418	30,590
Corresponding 12 months 1866-67,	1,396	3,402	19,937	50	727	5,251	25,188	1,012	8,312	26,661	1,488	4,020	2,781	29,442
Do., 1865-66,	1,135	2,215	14,278	42	382	1,560	15,838	657	3,859	12,494	1,337	2,501	2,280	14,774

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Recommended by this Department, but the issue of orders rests with the Revenue Department.

144. I say recommended, because, as in confiscations so in the case of these minor penalties, this Department only *recommends* a certain course. It forwards all the papers of the case to the Revenue Commissioner of the Division within which the offence is alleged to have occurred, and he, after hearing anything the traders may have to allege, passes the final orders. It is really satisfactory to be able to state that out of 4,171 cases referred to Commissioners, our recommendations were approved in 4,168 instances, and only modified in the remaining three cases.

This arrangement satisfactory and unobjectionable.

145. It is an old-standing departmental grievance that these cases have to be referred to the Revenue Commissioners, and are not decided by the Head of the Department. My conviction, after more than two years' experience, most decidedly is, that any change in the present system would be most injurious; indeed, I look upon the reference of these cases to a distinct department as one of the greatest safeguards we possess.

SMUGGLING, except across the Raipore Division, insignificant.

146. Except in the Raipore Division, smuggling, so far as the actual quantity of goods that succeed in evading our duty is concerned, is insignificant. The great improvement effected in the hedge during the past two years, and in the position of the subordinate establishment during the last year, have rendered smuggling in most places a very doubtfully-profitable employment.

In the three most important divisions—Agra, Delhi, and Muttra—smuggling is at a very low ebb.

147. In Agra, Delhi, and Muttra—the three most important, and of course strongest-manned, and most efficient divisions—it is very doubtful if altogether even five hundred maunds of contraband salt got clear across the Line; while, on the whole Line (excepting always the Raipore Division), notwithstanding the physical difficulties of the country, the weakness of the establishment, and the immature condition of the hedge in many places, it may be safely asserted that the grand total of *successful* illicit trade did not reach 5,000 maunds.

In Sirsa, Hansie, and Jhansie, a considerable increase might have been anticipated in consequence of the famine; but in Hansie an impregnable hedge, and in Jhansie judicious relief works, averted the evil.

148. In Sirsa there was a certain increase in smuggling during the latter half of the year, due to the state of semi-starvation in which a considerable proportion of the population were. In Hansie there might have been the same but for the generally excellent condition of the hedge. In Jhansie there must have been a great increase but for the activity of the local authorities, who organized relief funds and famine works (utilizing some of our officers for the good work) so promptly, and so extensively, that little if any addition to the ranks of the smugglers took place. In Saugor, where Line and hedge are both weak, and where not only *food* but salt itself was excessively scarce and dear within Line, the increase of smuggling was considerable. On the whole Line, however, excepting always Raipore, the results, so far as smuggling goes, have been most satisfactory. Although the circumtances were such as to afford an unusual incentive to illicit trade, a comparatively trifling increase in the number of attempts resulted, while the proportion of captures to attempts materially increased, if we may judge from head-loads (the most difficult captures to effect) by fully 50 per cent. (*vide* para. 122.)

On the whole, Raipore excepted, smuggling has been most satisfactorily kept in check.

The Raipore Line too weak to bar contraband trade effectually.

149. Raipore demands a separate notice. Constituted as this division now is, the Line is untenable; with posts nowhere less than three, and in some places seven or eight miles apart, the Bunjaras can pass it pretty much when and how they like, bag and baggage. The seizures we from time to time effect, exhibit pretty clearly the wholesale smuggling we have here to deal with. During the year under report, the following five *large* seizures were made :—

The heavy seizures effected during the past year,

	Mds.	Srs.			
No. 1, ...	858	19	on	171	bullocks.
,, 2, ...	173	13	,,	70	,,
,, 3, ...	145	19	,,	50	,,
,, 4, ...	55	22	,,	26	,,
,, 5, ...	33	14	,,	16	,,

SMUGGLING.

That ventures on this scale, involving if unsuccessful the confiscation of valuable cattle as well as of the contraband goods, still continue to be made, or rather, I ought to say, increase in frequency, can only result from their being often made with success. It seems to me hardly right to maintain a Line on the present footing of large portions of the Raipore Line—so weak that it must necessarily tempt people to break the law, and yet just strong enough to detect, and *utterly ruin* one in ten of the offenders. I have submitted to the Government of the Central Provinces a proposition for taking advantage of the abolition of the Nagpore Loop Line to place the Raipore Division on a proper footing.

afford an indication of the extent to which smuggling is here carried.

The Line requires to be strengthened, and proposals have been submitted accordingly to the Government, Central Provinces.

HEDGE.

150. Notwithstanding the very unfavourable character of last year's rains, great progress has been made in defending our Line by an impenetrable barrier. The hedge in every beat has been closely examined and measured, and we prove* to have altogether 448¾ miles of *perfect* hedge, and 233½ miles of hedge which, though strong and good, requires further additions to render it impenetrable. This hedge is in places solely a live hedge, in others entirely a dry, thorny barrier; while in others, again, it is a combination of the two.

Notwithstanding the failure of the rains, great progress has been effected.

151. The greater portions of this hedge, *viz.*, 408¾ miles of perfect, and 145½ of good hedge, are situated in the Punjab and North-Western Provinces Sections; in fact, if we except the first sixty miles of *quasi* desert through which the Line runs after leaving the Sutlej, there remain only eight and a quarter miles in the North-Western Provinces and Punjab Sections undefended by a fairly good hedge.

Excluding sixty miles of *quasi* desert in Sirsa, only 8¼ miles of the Punjab and North-Western Provinces Sections are undefended by a fairly good hedge.

152. This may seem a little matter, but the amount of labour expended on the work can scarcely be overstated, and both officers and men deserve as a body great credit for the cheerfulness and zeal with which they have toiled throughout the year.

This may seem no great matter, but has entailed a prodigious amount of labour.

153. The hedge is nowhere less than eight feet high and from four to five feet thick; but in places it is as much as twelve feet high and fourteen feet thick at the bottom. So impregnable have long stretches of the hedge become, that the smugglers have had during the past year to invent new methods of passing it, and throwing bags of salt over it. In the Hansie Division, a strong sapling, with lateral branches lopped off some few inches from the stem, is rested in a dark night against the hedge; and up this, as up a ladder, the smuggler climbs—the pole, as he mounts, pressing further and further in at the thin top of the hedge, so that at the top he may chance to be able to jump clear on the other side, of course leaving the tell-tale pole behind him.

The great increase in the strength of the hedge has compelled the invention of new devices by smugglers.

Division.	*Perfect.*			*Good, but not quite sufficient.*			Insufficient.	Total Number of Miles.
	Green.	Combined Green and Dry.	Dry.	Green.	Green and Dry.	Dry.		
Sirsa, ...	...	10	16	...	...	40½	60	126½
Hansie, ...	...	5	64½	...	...	...	...	69½
Delhi, ...	...	34¾	31½	...	23	3¾	3½	96½
Punjab Section, ...	...	49¾	112	...	23	44¼	63½	292½
Muttra, ...	4	35½	13	...	...	...	...	52½
Agra, ...	62¾	13¼	2	5¾	13½	3⅞	4⅜	105½
Jhansie, ...	15½	59	42	5	29¾	20¾	...	172
North-Western Provinces Section, ...	82¼	107¾	57	10¾	42⅞	24⅝	4⅝	330
Saugor, ...	...	...	...	34	...	2	108⅝	144⅝
Hoshungabad, ...	...	...	...	...	...	...	286	286
Nagpore, ...	0¼	...	39¾	3¾	8¼	40	360	452
Raipore, ...	...	...	...	...	...	...	268	268
Central Provinces Section, ...	0¼	...	39¾	37¾	8¼	42	1,022⅝	1,150⅝
Grand Total, Imperial Line, ...	82½	157½	208¾	48½	74⅛	110⅞	1,090⅞	1,773⅛

HEDGE.

Only two such attempts have been successful; but the trick has been tried repeatedly. In other divisions, a stout pole is furnished at top with four curved prongs, forming, as it were, the skeleton of a rather deep cup, in which the bag of salt is placed, and, by a jerk of the pole, sent flying well over the hedge, to be picked up in due course by some accomplice waiting by appointment on the other side. Several of these implements have been seized or found, and though by no means formidable, are interesting as showing that in many places the hedge is beginning to puzzle the smugglers considerably.

In the Central Provinces Section there is as yet but little hedge.

154. In the Central Provinces there is little or no hedge; in fact, it is only during the last two years that any attempt has been made to get up a real hedge there.

In the Saugor Division it is, however, progressing vigorously.

155. Throughout the Saugor and Hoshungabad Divisions, great efforts are now being made to raise an efficient barrier—a green hedge where it is possible, a dry hedge where it is not and no thorny material is available, and a stone wall where even thorns are not to be had. This stone wall, however, is rather a bugbear; it is very slow work, involves much *terribly* hard labour, and unless put together carefully and according to the instructions we have issued (which it has rarely hitherto been), tumbles down as soon as completed, if not sooner. However, about a mile of substantial wall, built on a proper system, is said to have been completed; and, probably with further experience, even the stone wall will, where absolutely indispensable, be sooner or later accomplished. Of the Saugor Division I have great hopes; the Collector, Mr. F. R. Blewitt, is very energetic in this matter, and the posts average about one mile apart. In Hoshungabad less energy is displayed, *and*, throughout the major portion of the division, the posts are too far apart to render it possible for the men to keep up a *really* efficient fence.

Less so, however, in the Hoshungabad Division.

This will be, however, of less consequence when the G. I. P. is open as far as Nursingpore.

156. This, however, is of less consequence since, with the G. I. P. Railway running close inside the Line, carrying cheap Kokan salt, no very formidable barrier against smugglers of dear Rajpootana salt will be needed. As regards the rest of the Central Provinces Line, the greater portion of the Nagpore Division is to be given up at the close of the present official year, and from Chanda the rest of the Line is too weak to enable a really good hedge to be kept* up. Four men *may* keep a mile of hedge in a thoroughly efficient state; but when they have charge of three to six miles it is out of the question. Moreover, in long stretches of this Line we have no ground on which to plant and construct a hedge; and so long as the ultimate maintenance of this portion of the Line remains doubtful (and the equalization of the duties would at once enable us to dispense with it), it has seemed undesirable to put Government to the expense of taking up land for the purpose.

In the rest of the Central Provinces, insuperable difficulties present themselves to the formation of a really good hedge.

Where we most require a hedge is from the Sutlej to the Nerbudda, and throughout this portion of the Line its completion (excepting some 50 miles of rock and desert) may be looked for in about three years.

157. Taken as a whole, however, where we chiefly require a hedge is from the Sutlej to the Nerbudda, some 730 miles. Already 590 miles of this are defended by a *good* hedge, which for two-thirds of this distance may be considered perfect; and, with the exception of some fifty miles of desert sand and rocks, I believe that (unless we are afflicted with continued drought) we shall in three years' time have the whole of this portion of the Line provided throughout with a perfect barrier of one kind or another.

Men and officers have greatly exerted themselves in this matter, and the results, considering the drought, have been satisfactory.

158. I must again repeat that very great exertions have been made by both officers and men where the hedge is concerned, and that, considering the almost total failure of rain in so many districts, the results in the Punjab and North-Western Provinces Sections of the Line have been most satisfactory.

ESTABLISHMENT.

Difficult to convey an adequate idea of the amount of work of one kind and another performed.

159. It is difficult to convey, either in words or figures, an adequate idea of the immense amount of work done during the year by our officers and men as a body. To say that our officers marched and patrolled 350,000 miles, and weighed over 200,000 tons of goods, that the men walked over 18,000,000 of miles, dug over 2,000,000 of

* Moreover, in Chanda itself, the Deputy Commissioner, so far from aiding us, has, as the Collector of the division writes, "steadily opposed the construction of a hedge of any description whatsoever."

cubic feet of earth in connection with the trenches and banks for the new green hedge, collected and carried over 150,000 tons of thorny material for the dry hedge, and so on, sounds like one of the arithmetical puzzles attributed to the "Circumlocution Office," and conveys no real idea of the facts. For our Line officers there are neither Sundays* nor holidays, and the night† brings no remission from labour during the whole year. The whole body of officers have averaged, for each officer for each day of the year, 1·041 excursions, and 9·268 miles of regular patrolling (two-thirds of this during the night), besides the weighment of 194·517 maunds of goods, office-work, reports, returns, registers, the preparation of cases, collection of statistics, &c. For the men, there are six hours of duty by day and six hours by night, and hedge-work off the Line, and lying in wait on information received, &c., &c., over and above this. Men and officers are *now* adequately remunerated, and complaints are rarely heard; but, for all that, I believe that under the present system of administration there is no large body of men in the world from whom so much unintermitting and *hard* labour is required. Less than a million and a quarter sterling must seem a very poor return for all this incessant and trying toil; but it may be safely asserted that the men at least have done their best, and that since the increase of the pay of the subordinate establishment, no appreciable fraction of revenue has been lost that could have been realized by any exertion on *their* parts.

OFFICERS have nearly all deserved commendation in one way or another.

160. Taken as a body, our officers have done very well, and have nearly all merited commendation in one way or another; but the following officers are those who, *in all respects*, appear to me to have best deserved the notice of Government:—

Officers who seem in all respects to have best deserved the notice of Government enumerated.

Collectors and Assistant Commissioners.

Amongst Collectors and Assistant Commissioners—Messrs. Bell, Wright, W. Blewitt, Parsons, and Ray.

Patrols and Deputy Inspectors.

Amongst Patrols and Deputy Inspectors—Messrs. Conroy, H. Blewitt, Nizam-ood-deen, Clarkson, Adam, Verrieres, Dutton, J. C. M. Palmer, Purbhakhur Rao, Bowles, G. A. Bradford, Synnott, Masoom Allee, Ahmed-oollah Khan, Baness, R. J. Whitten, J. R. Harris, Cosseratt, Hardingham, C. P. Ashton, Grindlay, and Kalee Naryn Roy.

Assistant Patrols.

Amongst Assistant Patrols—Sheikh Ghazee-ood-deen, Messrs. Durham, Tuther, Kanonas, Paxton, Reid, J. W. Jones, Howard.

The Deputy Commissioner's valuable services specially brought to the notice of Government.

161. It seems needless to add that throughout the year my able coadjutor, Mr. F. W. Vere, whose long and valuable services have recently been substantially recognized by Government, has laboured with his usual indefatigable zeal, and has in all matters seconded me with that single-minded devotion to the interests of the public service, for which he has always been conspicuous.

A variety of measures has greatly improved the status of our officers, and enhanced their value to Government as a body of public servants.

162. The improvement in the prospects of the service, the rigid adherence to the rules laid down last year for the admission of candidates into the Department, the greater strictness of the examinations the junior officers have to pass, the *far* greater familiarity with the Vernacular insisted on, the distribution to all officers of last year's comprehensive Report, and of separate detailed divisional trade reports, the necessity imposed on all of collecting facts, thinking about and reporting on them, and other similar departmental reforms, have undoubtedly very greatly enhanced the value to Government of our officers as a body of public servants.

The extra labour entailed has naturally led to a little grumbling, but as a whole the officers deserve great credit for the cheerful and zealous manner in which they have accommodated themselves to an altered state of affairs.

163. Of course all this has entailed much extra labour, and of course (most of our officers being Englishmen) it led at first to no little grumbling; but the novelty of being expected to observe carefully, think over and report accurately, on all matters affecting the interests of the Department is wearing away, and in a couple of years the majority of these gentlemen will, I am sure, be the foremost to admit that no part of their labour has been thrown away. It is much to their credit that, little as most of them liked the

* Goods are not weighed on Sundays, but all patrolling, &c., requires to be as vigilantly performed as on any other day.

† Line officers require to be, and *are*, more about during the night than during the day.

new work to begin with, the great majority took it in hand with as much energy and zeal as if it had been a favourite pursuit.

MEN are now well paid, and as a body, cheerful and zealous.

164. The men are now well paid, and as a body, most cheerful and zealous workers. The difference observable since the increase of pay and the concessions already alluded to, is very marked. For years past the great difficulty has been, in many divisions, to keep the establishment up to its sanctioned and required strength, even by accepting all comers as recruits; now recruits come forward in numbers and we can reject incompetent men, and pick and chose as much as is necessary: formerly, on the slightest reproof, men habitually flung down their badges; now they value their positions, and consider it a great hardship to be dismissed. On the introduction of the new scale of salary, opportunity was taken to weed out and dispense with all old, feeble, and incompetent men (gratuities being awarded to all deserving persons); and, on the whole, the force is now as good and serviceable a body of men as one would desire to see. We are not particular about height, so the irregularity of size would offend a military eye; but what we look to are activity, intelligence, and steadiness, and so far as these great requisites are concerned, the average standard of the force is very respectable.

Great improvement in the force consequent on its improved position.

Great difficulty arises out of our ignorance of the antecedents of our recruits.

165. One great difficulty we have to contend with is our ignorance of the antecedents and real residences of our recruits; not only do new men of bad character find their way into the force, but detected rascals dismissed in one division find employment in another distant one. No *descriptions* are sufficiently accurate to prevent this in most cases; it is only where there is something very peculiar in a man's personal appearance that it can be avoided. What we absolutely now require to give Government the full advantage of the liberal salary they allow, is a brief Enlistment Act, something on the model of the North-Western Provinces Police Act, and permission to send all enlistment-rolls for attestation, through the tehseeldars, by the zemindars or other respectable inhabitants of the recruit's village, to the district officials, just as is done in the case of all sepoys.

We require a brief Enlistment Act, and permission to send enlistment-rolls for verification to District Officers.

This would much improve our control over the men

166. This would give us a great hold on our men, especially in theft and connivance cases, which, though more rarely, still do occur even now. Before the increase of pay, it was a common thing in some divisions for the one peon remaining during part of the night at the chowkee (the other three men and the jemadar being out on the Line, as often happens) to disappear quietly with all the brazen utensils of his comrades. Such men were never *once* I believe captured; men intending to play such tricks of course entered under false names, and gave false residences. Such causes, though now much less frequent, still do occur.

and would be especially useful in preventing the escape of men conniving with smugglers.

167. Again, when the men of a Line chowkee have conspired fraudulently to pass a despatch of smuggled salt at night, and the below-Line patrol party have caught the smugglers before they could get out of jurisdiction, wind of the seizure reaches the chowkee, as a rule, before any responsible officer can be sent there to arrest the chowkee people, and they at once disappear. Such men are of course liable to punishment by the Criminal Courts, but we *never* can catch them. These cases, common enough in former times, are rare now; but two such have occurred during the past year, and it is really of great importance that offenders of this nature should not escape punishment, which is of course unavoidable so long as we remain in ignorance of our men's real homes.

Other obvious reasons for wishing to tighten our hold over a force now consisting of 12,000 men, and soon to number 18,000.

168. There are other obvious reasons for wishing to maintain a more efficient check than is now possible on our recruiting operations; the force even now numbers nearly 12,000 men, and with the transfers and changes now in progress and contemplation, will number fully 18,000. A small army like this, even though spread over 3,000 miles of Line, requires a more systematic control than is quite practicable without regular enlistment, and attestation at the recruits' home of all recruit-rolls.

ESTABLISHMENT.

As a rule, men are not employed in the neighbourhood of their houses.

169. As a rule, we do not employ in any locality residents of the neighbourhood. The homes of 87 per cent. of the men are, according to their statements, distant over 50 miles from the sphere of their official action. Thirteen per cent. of the men live within 50 miles of their beats; but, *so far as we* know of it, no one is allowed to be stationed in the immediate neighbourhood of his home. The percentage of course varies in different parts of the country: in the disagreeable portions of the Punjab Line, residents of distant localities are very averse to serving, and there the percentage of these is only 77; while in the Central Provinces, the "Natives" do not enlist readily, and rarely work well when they do, so that here the percentage of non-residents is 97.*

Constitution of the force as regards caste.

170. About 42 per cent. of the force are Mahomedans, the remainder Hindoos; of these latter about 17⅓ per cent. are Brahmins, 16½ per cent. Rajpoots, 3¾ per cent. Kayaths, and the remaining 20½ per cent. of all possible castes. Much has been done during the past eighteen months in the way of mixing up the various castes evenly along the Line, rooting out nests of particular castes, and the like. A good deal, however, still remains to do. Changes of this nature are necessarily slow—sudden and sweeping moves being injurious to discipline; but the matter receives constant attention.

Until recently, men were prohibited from having their families with them.

Reasons for such prohibition.

171. Until last year, the men, in accordance with a long-standing departmental rule, were prohibited from having their families living with them on the Line. The idea was that the men would get quarrelling about the women, would meddle with each other's wives, and would be always with their families instead of out on the Line. Further, it was supposed that the men's wives would make friends with the village women, and through such intimacy be led to seduce their husbands into conniving with smugglers.

Reasons appeared inconclusive, while the advantages of permitting the men to have their wives with them appeared great.

172. I was by no means satisfied that these suppositions were well grounded, *per contra*, the advantages of the men's having their families with them appeared to me very great. As a matter of fact it is running after women that chiefly induces our men to stray from the Line, and it is meddling with women that primarily leads to almost all the quarrels they have with the villagers. A considerable number of men are always more or less unfit for duty owing to venereal diseases. A man with his wife on the Line escapes all these dangers; when, after six hours duty on guard, and four or five of hard hedge-work, he comes back to his hut, he finds his food ready cooked; his children help him with the hedge; he cannot disappear at a moment's notice; his pay goes further when his family is with him by at least a rupee a month; he is no longer always wanting to get leave to go away and look after his people; his home is on the Line; and dismissal becomes a penalty very greatly dreaded.

It was, therefore, decided to try the experiment under certain rules and restrictions.

173. Weighing all these considerations, I determined to try the experiment, and all the men were informed that they were at liberty to bring their wives and families on the Line, and to construct for them small huts near to the chowkees.

Instructions† were given so as to prevent women of ill-fame being brought, and to avert possible disagreements between the men. Many officers, specially amongst the

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* In Appendix H. will be found numerous details as to the strength and constitution of the force, *according*, of course, to the men's own statements.

† *Circular No.* 53 *of the* 11*th June*, 1868.

"On full consideration of the many advantages to the men themselves, and in the hope that out of their bettered condition the Department may itself derive profit, I have decided on extending to the upper divisions the experiment, now for some little time in progress in the Central Provinces, of allowing subordinates to keep their wives and children with them on the Line. The concession is to be introduced under the following rules:—

"1*st*.—Men may keep their wives and families at their posts.

"2*nd*.—Each man must provide a separate hut at his own expense, and close to the Government chowkee, for his own people, and must keep these premises clean.

"3*rd*.—No man must keep his wife or family anywhere within the precincts of the Customs' jurisdiction of his own beat, except at the chowkee itself.

"4*th*.—Any man found infringing this rule, is to be at once dismissed.

"5*th*.—Before bringing a woman to live on the Line, a man must give in a written application, stating that the woman is actually his wife, for permission for her to reside on the Line.

"6*th*.—Residence of prostitutes at our posts will not be allowed. Any man convicted of introducing a woman of that class, is to be dismissed.

"7*th*.—Any woman who may leave one of our men to live with another, will disqualify herself for Line residence, and the man to whom she has gone must part with her or be dismissed.

"2. A translation of these rules is appended, and officers of the Line are to take early occasion, say on the first distribution of pay after receipt of these orders, to have the purport of the translated rules minutely explained to his men."

ESTABLISHMENT.

As yet it has not had quite a fair trial;

but where tried, appears to have succeeded very well.

seniors, were averse to the change, and partly on this account, and partly for reasons that I will explain further on, the measure has not in most places had a fair trial. Only 535 men altogether have availed themselves of the permission. Of these, 468 belong to the Jhansie and Central Provinces Divisions; and in these divisions, where to a certain extent a fair trial *has* been given, the officers are now unanimous in stating that the measure has been beneficial. In the other divisions, where but very few have availed themselves of the concession, and where, therefore, they have had no proper means of judging of the practical working of the thing, many officers still condemn it, *not* on account of anything that *has* happened (for in no division yet has any quarrel, or other untoward occurrence* resulted), but on the old-established assumptions that such and such consequences *must* ensue. Such consequences have, however nowhere yet ensued where the plan has been extensively tried, so that, as far as the established prejudices go, the measure as yet appears to have been successful.

None of the evils predicated by the opponents of the measure have as yet resulted.

The "nikah" marriages of Mahomedans with women of doubtful character one drawback.

Even here the advantages outweigh the disadvantages.

174. One unforeseen drawback, however, occurs. Mahomedans generally do not, it seems, bring their *home*-wives to the Line; they marry by "nikah" women as Line-wives, whose antecedents in a considerable number of the cases are anything but respectable. This is not what it should be; but as the women appear to conduct themselves properly when thus married, and as such marriages are lawful according to the religion of the parties, and as they appear unquestionably to make the men steadier, more useful servants, and more comfortable, they must be tolerated.

Many men do not wish to bring their families on the Line.

But the objections of some may be removed in a great measure as time goes on.

175. Many of the men object to bring their wives, because of their own liability to transfer (of which, in some divisions, there has been far too much), and the expense of building new quarters at each post they go to. This obstacle will be removed when there are married-quarters at each chowkee, and in the meantime can be greatly diminished by avoiding as far as possible the transfer of married men who have hutted their families, except for grave misconduct. As for married-quarters, in many beats where the live hedge is thriving, wood in abundance is available; while, wherever the hedge is complete and needs comparatively little labour, the men can easily make for themselves the necessary mud walls and flat mud roofs.

Probably for many years not above half the men will avail themselves of the privilege.

The experiment, thus far successful, will be persevered in, and its results carefully watched.

176. Under any circumstances, for many years to come something like half the men will not bring their families, quarters or no quarters, on to the Line; but about one-half I think will do so, where officers offer reasonable encouragement. The experiment will be carefully watched; so far as it has yet been tried it has proved successful.

Casualties.

Appear to have been excessively numerous.

177. To judge from the casualty returns of the past year, the first for which they have been at all correctly made out, the whole of the subordinate establishment

* Except, indeed, a case of suicide; a lady having thrown herself down a well owing to a quarrel with her husband. This she would have done all the same had he been on a visit to her in her Native village.

† STATEMENT SHOWING THE CASUALTIES AMONGST THE SUBORDINATE ESTABLISHMENT DURING THE OFFICIAL YEAR 1868-69.

	Number of each Rank and Grade.							Total Subordinate Establishment.	Percentage of Total of each kind of Casualty on Total Establishment.
	Sub-Assistant Patrols.	Kotegushts.	Jemadars.	Weighmen.	Mohurrirs.	Collector's Orderlies.	Line Peons.		
Total sanction, ...	131	196	1,093	90	326	174	9,575	11,585	
During the year died, ...	4	1	10	2	4	2	84	104	0·89
Were dismissed, ...	3	15	90	7	17	11	1,392	1,535	13·25
Deserted, ...	...	1	6	...	...	1	493	501	4·32
Resigned, ...	2	7	16	3	12	18	576	634	5·74
Total casualties, ...	6	24	122	12	33	32	2,545	2,774	
Percentage of casualties, ...	4·57	12·24	11·16	13·33	10·2	18·39	26·58	23·94	

is changed in four years! The percentage of casualties of all kinds in the whole force was in round numbers twenty-four for the past year.

178. As a matter of fact, I believe that for many years about half of the force (comprising all the old trained hands) has changed but little, probably not more than to the extent of 10 per cent. per annum, while the remaining half (consisting of new men who did not like hard work and bad pay) has been perpetually changing at the rate of probably 33 per cent. per annum.

The force has hitherto consisted of two nearly equal bodies, the one changing but little, the other altering very rapidly.

179. As will be seen,* the death-rate, about nine per thousand, appears low, but the fact is that less than half the deaths that really occurred are recorded in the statement, because men when sick invariably, when they can, take leave and return to their homes to die, or die travelling towards them. As a rule, it is only comparatively sudden deaths from cholera, acute fever, accidents, and the like, that appear as deaths in our returns. Men go on leave sick, and we never hear anything more of them; some die, some recover and take service elsewhere. Judging from what we know, the death-rate probably exceeded twenty *per mille*, and considering the hard life led by the men, the loss of rest at night, and the exposure in all weathers, this is not to be wondered at.

Deaths.

180. The dismissals would appear to have been extraordinarily numerous, but this is in a great measure owing to the erroneous classification adopted by the Collectors, who have entered as dismissals all men who took leave and failed to rejoin (many of which were really deaths, and the rest desertion), and who have further entered as dismissals all the aged, infirm, and incompetent men removed on the introduction of the new scale of salaries.

Dismissals.

181. The desertions and resignations, although numerous, mostly occurred before the introduction of the new scale of pay, and will in future years be, it is expected, comparatively few. Next year I shall hope to be able to furnish a more detailed and accurate classification of our casualties, which there is every reason to believe will not exceed one-half of what they have been.

Desertions and resignations.

182. The conduct of the subordinate establishment has, on the whole, been good; altogether, out of 11,585 persons (Berar is excluded here, as elsewhere, in this General Review) 75, or 0·6 per cent., were convicted† of one offence or another by the Criminal

Conduct of the subordinate establishment satisfactory.

* See Statement, page 40.

† TABLE SHOWING THE NUMBER OF THE SUBORDINATE ESTABLISHMENT CONVICTED BY THE CRIMINAL COURTS DURING THE YEAR 1868-69, AND THE NATURE OF THE OFFENCES PROVED AGAINST THEM.

	Conniving with Smugglers, and Receiving Bribes.	Murder.	Culpable Homicide.	Rape.	Criminal Force and Assault.	Robbery.	Theft.	Criminal Misappropriation of Property.	Extortion.	Trespass.	Total.
Sirsa, ...	2	...	...	...	1	...	1	...	...	...	4
Hansie, ...	...	...	...	...	2	...	1	...	...	...	3
Delhi, ...	...	...	...	...	6	1	1	4	...	...	12
Total, ...	2	...	...	...	9	1	3	4	...	...	19
Muttra, ...	8	...	...	...	1	...	...	...	...	...	9
Agra, ...	1	...	...	...	...	...	...	...	...	...	1
Jhansie, ...	3	2	...	...	...	...	5	...	4	...	14
Total, ...	12	2	...	...	1	...	5	...	4	...	24
Saugor, ...	1	...	...	...	...	...	...	...	...	...	1
Hoshungabad, ...	...	...	...	...	4	...	3	...	...	1	8
Nagpore, ...	...	...	1	1	6	...	5	...	...	...	13
Raipore, ...	...	...	...	...	...	...	2	...	...	1	3
Total, ...	1	...	1	1	10	...	10	...	...	2	25
Total Line, ...	15	2	1	1	20	1	18	4	4	2	68
Internal Department, N.-W. P., ...	...	...	...	...	1	...	2	...	...	...	3
Do., Oudh, ...	2	...	...	...	...	...	...	...	...	2	4
Total Internal, ...	2	...	...	...	1	...	2	...	...	2	7
GRAND TOTAL, ...	17	2	1	1	21	1	20	4	4	4	75

ESTABLISHMENT.

Courts during the past year. Of these, 21 were cases of assault and the use of criminal force, 17 of colluding with smugglers and receiving bribes, and 20 of theft—many of these latter petty offences (such as plucking sugar-cane out of a field to eat) but yet requiring to be rigidly repressed. In such cases as it was interested in, the Department commonly prosecuted; but, except the bribery and extortion, and a few of the assault cases, scarcely any had any connection with the discharge of the offender's official duties.

CONCLUSION.

A VARIETY OF INTERESTING DETAILS IN REGARD TO THE SALT AND SUGAR TRADE WILL BE FOUND IN THE DIVISIONAL REVIEWS.

183. In conclusion, I may remark that, in the separate Divisional Reviews which follow this General Report, I have noticed all matters of special local interest, explained all local fluctuations in revenue imports and exports, and have given for each division of the whole Line the gross realizations as compared with previous years, the different descriptions of salt and sugar crossing the Line in each, the sources from which these are derived, the intervening marts, if any, at which they are purchased, the country over which they are sold, the prices they have borne above and below Line during the past year, the means of conveyance by which they reach the Line and by which they are thence carried to their several destinations, the cost of such carriage, and the description of goods which come and go in return for them.

ALLAN HUME,
Commissioner Inland Customs.

Divisional Reviews.

THE SIRSA DIVISION.

[*Length*, 126½ *miles*; *Number of Guard-posts*, 113. *Superior Officers*, 11; *Petty Officers*, 141; *Privates*, 661; *total Establishment*, 813. *Annual average for the three years ending* 31*st March*, 1869: *Exports—Sugar*, 1,37,972 *maunds*; *Imports—Salt*, 6,310 *maunds*.]

SIRSA.
GROSS REALIZATIONS.

In Sirsa, the gross realizations (1) fell short of those of the preceding year by half a lakh of rupees, a sum equivalent to nearly 46 per cent., of the revenue of 1867-68.

The loss was heaviest in sugar, in which it exceeded 52 per cent; but even in salt there was a decrease of more than 22 per cent.

Causes of decrease.

2. The famine was the most important and serious cause of these deficiencies; but the Local Officers are of opinion that, where salt is concerned, a gradual widening of the area of consumption of rock-salt,* and increase in the illicit manufacture within Native States, have also operated to reduce the realizations of this division.

Salt.
Fluctuations explained.

3. Phullowdee, (2) the chief salt that crosses in this division, fell off from 4,277 maunds to 2,952 maunds. Lahoree salt comes down to, and even crosses, the Line in small quantities. Only the poorer-classes in the immediate proximity of the Line are supplied, as a rule, across† it, and they were so pressed by the drought that numbers emigrated, and those who remained consumed less salt than usual. In Deedwana there was a trifling increase; but this resulted from the works lying immediately in the return route of the traders who carried grain southwards into Rajpootana.

Sugar.
Distribution.

4. The sugar (3) exported in this division was chiefly consumed in Beekaneer and the northern portions of Jaipore and Jodhpore. The condition of these territories (already described) and the scarcity and high-price of the article itself, due to the wide-spread failure of the crop in the Upper Ganges and Jullundher Doab, and the absorption of all available carriage in the transport of grain, sufficiently explain the

Decrease explained.

(1) *Gross Realizations of the Sirsa Division.*

Year.	Salt.	Sugar.	Miscellaneous.	Total.
	Rs.	Rs.	Rs.	Rs.
1868-69, ...	16,741	38,724	1,437	56,902
1867-68, ...	21,577	81,668	1,919	1,05,164
Corresponding 12 months of 1866-67, ...	19,347	1,09,521	1,294	1,30,162
Ditto ditto 1865-66, ...	14,068	96,734	1,353	1,12,155

(2) Actual Imports.—*Detail of Salts of all Descriptions that actually crossed the Sirsa Line.*

Year.	Sambhur.	Deedwana.	Phullow-dee.	Kharee.	Puchbud-dra.	Total.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
1868-69, ...	38	1,724	2,952	853	27	5,594
1867-68, ...	...	1,124	4,277	1,764	76	7,241
Corresponding 12 months of 1866-67,	...	311	3,846	1,971	321	6,449
Ditto ditto 1865-66,	...	33	2,744	1,887	25	4,689

(3) *Detail of Refined and Unrefined Sugar Exported from the Sirsa Division.*

Year.	Refined.	Unrefined.	Total.
1868-69, ...	14,069	65,746	79,815
1867-68, ...	36,446	1,20,588	1,57,034
Corresponding 12 months of 1866-67, ...	42,346	1,79,136	2,21,482
Ditto ditto, 1865-66, ...	43,285	1,42,528	1,85,813

* During the past year nearly 500 maunds of rock-salt crossed the Line at the Urneewalla post, going southwards to Rajpootana; a thing previously unheard of.

† A few small marts in the Puttiala, Nabha, and Jheendh States, also draw a portion of their supplies through this division; but home-made earth-salt and rock-salt appear to be the chief staples of consumption in these States.

great falling-off in sugar. As usual, of what little sugar was exported, an increased proportion passed untaxed by the Chenab route.

Loss sustained by the open Chenab route.

5. The loss by this increases yearly, and will be very serious when, by the extension of railway communication, the Upper Indian sugars drive back, as they will, Bombay sugar, which now comes as far as Sukker.

COURSE OF TRADE.

Posts at which salt passes.

6. As usual, the first five posts passed no salt (there being no depôts above this part of the Line), nearly the whole of which crossed at Durbee and Jodka. These posts lie in the direct route from the sources in Beekaneer and Jodhpore to the marts

Marts above and below Line.

of Ellenabad, Rauniah, and Sirsa, above Line; and Rooree, Ruttea, Futtiabad, and Tohunna, below Line.

CARRIAGE AND ITS COST.

7. Almost all the salt in this part of the country is carried by camels at average rates of from one and one-eleventh to one and three-fifths pies* per mile per maund.

Posts at which sugar passes.

8. The mass of the sugar passes at Fazilka, Sahoowala, Durbee, and Jodka, enumerated in the order of the importance of their trade. Fazilka and the Western

Where the sugar comes from.

posts chiefly pass the sugar of the Jullundhur Doab; Durbee, and the Eastern posts, that of the Puttiala and Nabha States (known as "junglee"), and the Upper Ganges Doab.

Where the sugar goes to.

9. Most of the refined sugar that passes at Fazilka seems to have gone to Soorutgurh, Minchinabad, and Bhawulpore, and most of the unrefined to Ubhore, Umrooka, Beekaneer, and Sirdargurh, though some of each went to all these marts; Sirsa

Carriage and its cost.

absorbed most of what crossed elsewhere on the Line. Sugar is carried at about the same rates as salt, on camels; but that which comes to Fazilka by cart from Ferozpore, Jullundhur, &c., costs on an average two pies per maund per mile.

Return trade.

10. Sugar and salt pass the Line both as original investments and return freights, but chiefly as the former. Grain, oil-seeds, ghee, and sugar are the complements to salt; wool, cocoa-nuts, dried dates, madder, sujjee, betel-nuts, and salt, to sugar.

PRICES.

11. Phullowdee salt averaged at Sirsa itself, and other marts above Line, Rs. 1-7-11 per maund, and at Rooree, Futtiabad, and other marts not far below Line, Rs. 4-9-4. Deedwana seems to have ruled a trifle cheaper. The poorest classes use a good deal of an impure salt† made in the village of Surh (Beekaneer), and this is almost the only salt that is smuggled across the Line here. This salt averaged at the marts above Line 13 annas, and below Line Rs. 4-4-11 per maund. As for sugar, in the neighbourhood of Sirsa, according to the Collector, the refined averaged Rs. 13-14-3 per maund above, and Rs. 12-15-2 below Line; and the unrefined, Rs. 5-15-3 above, and Rs. 5-11-9 below Line: but Mr. Tuther, writing from Fazilka, says that refined sugar averaged Rs. 4-14-0 at Ferozepore, and Rs. 7-14-0 at Soorutgurh; and that the unrefined averaged at the same marts Rs. 3-14-0 and Rs. 6-6-0 respectively.

The quality of refined and unrefined sugar varies so much, that a confusion as to prices always arises.

12. The great difficulty with sugar is, that there are innumerable qualities in the market undistinguished by distinct names; and unrefined sugar from some parts is quite as good, and sells as high, as the so-called refined sugar from other parts. Peculiar qualities affect particular marts, and it may happen that at towns not 40 miles apart, "refined sugar" is selling at apparently incredibly different rates; the fact being that the article sold at the two places, though called by the same name, is utterly different in quality and value. In salt there is no such difficulty, each quality bears its own name; but where sugars are concerned, there is often a confusion about prices.

* The Collector gives from 2½lbs. to 3¾ pies, but he gives no details and no explanations; while the detailed statements of the Local Officers at Fazilka, Jodka, and Bhuttoo, show that his rates are too high.

† Known as kharee, but not to be confounded with the real kharee, or sulphate of soda.

THE HANSIE DIVISION.

[*Length* 69½ *miles; Number of Guard-posts,* 137. *Superior Officers,* 7; *Petty Officers,* 74; *Privates,* 710; *total Establishment,* 791. *Annual average for the three years ending* 31*st March,* 1869: *Exports—Sugar,* 1,96,351 *maunds; Imports—Salt,* 2,30,227 *maunds.*]

HANSIE.

GROSS REALIZATIONS.

13. The Hansie collections (4) fell about three-fourths of a lakh, or 4½ per cent., below those of 1867-68. The loss was entirely in sugar; in salt there was a slight increase. This latter would have been far greater (for prices ruled high at the marts inside the Line, and the continued development of railway communication northwards and eastwards has undoubtedly stimulated trade), had not the utter impossibility of procuring fodder and water along the routes leading from the chief sources that supply this division gradually *choked** off our imports. Prices rose higher and higher at Balsamund and Bhewanee, the chief marts above Line, and stocks were nearly exhausted when, just towards the close of the year, rain fell; water and herbage became available, and traffic to the sources re-opened.

Slight increase accounted for.

14. A second heavy fall, however, for a time suspended trade, and when, about a fortnight later, it resumed its briskness, the official year had closed.

Temporary suspension of trade.

15. Ten-elevenths of the salt that actually crosses (5) in this division is Deedwana, and in both this and the sole other staple, Sambhur (which only crosses at the Eastern posts), there was, after all, a small increase.

SALT.

16. Nearly three lakhs of maunds of Sambhur and Deedwana salt, intended for the North-Western Provinces, Oudh, &c., pay duty (6) at this Customs-house, but really cross the Line in the Delhi Division.

Distribution.

(4) *Gross Realizations of the Hansie Division.*

Year.	Salt.	Sugar.	Miscellaneous.	Total.
	Rs.	Rs.	Rs.	Rs.
1868-69, ...	15,72,997	1,69,680	2,253	17,44,930
1867-68, ...	15,44,360	2,79,700	913	18,24,973
Corresponding 12 months of 1866-67, ...	15,58,319	3,15,775	1,834	18,75,928
Ditto ditto 1865-66, ...	15,25,194	2,83,472	754	18,09,420

(5) ACTUAL IMPORTS.—*Detail of Salt of all Descriptions that actually crossed the Hansie Line.*

Year.	Sambhur.	Deedwana.	Black.	Miscellaneous.	Total.
	Mds.	Mds.	Mds.	Mds.	Mds.
1868-69, ...	25,199	2,04,452	283	144	2,30,079
1867-68, ...	17,849	1,91,803	307	38	2,09,996
Corresponding 12 months of 1866-67, ...	33,646	2,14,475	2,499	143	2,50,762
Ditto, ditto, 1865-66, ...	20,273	2,05,829	1,323	56	2,27,482

(6) NOMINAL IMPORTS.—*Detail of Salt of all Descriptions on which Duty was paid in the Hansie Division of Customs.*

Year.	Sambhur.	Deedwana.	Black.	Phullowdee.	Sooltanpoorie.	Kharee.	Salumbha.	Rewass.	Total.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
1868-69, ...	2,10,368	2,88,320	4,337	...	20,905	89	286	27	5,24,332
1867-68, ...	1,96,738	3,02,089	4,216	4	11,684	5	23	28	5,14,787
Corresponding 12 months of 1866-67, ...	1,84,781	3,06,497	8,953	6	19,079	115	...	8	5,19,439
Ditto, ditto, 1865-66, ...	1,66,098	3,19,198	5,603	22	17,276	196	...	4	5,08,397

* Fodder, in some parts contiguous to this division, rose as high as two small bundles for the rupee; one such bundle per diem being the smallest quantity on which draught-cattle could subsist. All tanks and ponds dried up; and where, here and there, one yet retained a little water, or wells (few and far between) existed, the zemindars charged the passing cattlemen from 3 pie to 2 annas a head for watering their cattle!

SUGAR.

Causes of decrease explained.

17. In sugar the falling-off was great (I refer to the actual (7) exports—the nominal (8) ones differ widely), nearly 45 per cent. in the refined, and more than 18 per cent. in the unrefined article. Total failure of the crop in some places; its utilization as fodder in others; scant supplies, with high prices; diminished carriage, due to loss of cattle; the pressing needs of the grain* trade; distress amongst, and emigration of, so many of the consumers—sufficiently account for the great† loss sustained in this division.

COURSE OF TRADE.
SALT; whence imported;

18. The two marts of Balsamund and Bhewanee supply the whole of the salt that crosses in this division—the former Deedwana only, the latter this and Sambhur. Carts, camels, buffaloes, and donkeys—but chiefly the two former—bring the salt to the Line, and thence take it to the villages and marts within short distances of the Line—Hissar, Hansie, Ghirae, Burhwallah, Narnound, Khote; and in the case of those that cross at the eastern parts of the Line, to the more distant markets of Paneeput, Kurnaul, Soonputt, Amballa, Shamlee, Nujeebabad, Nujjeena, Meerut, Moradabad, Saharunpore, and Dehli. Salt in this division is almost invariably taken as an original investment; sugar and grain being the ordinary return freight. The cost of carriage for the shorter distances, by all kinds of conveyance, seems to vary from one to one and three-fifths pie per maund per mile; while that for the longer journeys, chiefly by cart, and over metalled roads, averages about nine-tenths of a pie per mile.

its destination.

It is taken as an original investment.

Cost of carriage.

SUGAR; where it comes from; where it goes to.

19. Shamlee, Kurnaul, Soonputt, and Gohana, are the chief sugar marts whence the Hansie exports are drawn, and Bhewanee the only mart of importance to which these exports go—the rest finding their way in small despatches to all the villages of Beekaneer, and the north of Jaipore and Jodhpore, immediately south of this portion of the Line.

Cost of carriage.

20. The cost of carriage of sugar, which generally comes as a return freight to salt, appears to be usually the same as that of this latter article; but, during the past year, owing to the competition of the grain trade, as much as four pies per mile is said to have been paid at the marts of Bhewanee and Balsamund above Line. Sambhur salt varied from Rs. 1-10-0, to Rs. 2, averaging about Rs. 1-12-2; while Deedwana at the same places varied from Rs. 1-4-6 to Rs. 1-15-0, and averaged Rs. 1-8-4. Below Line, at Shamlee, Kythul, &c., Sambhur averaged about Rs. 5-5-8, and Deedwana Rs. 5-1-10 per maund.

PRICES of salt above and below Line.

(7) ACTUAL EXPORTS.—*Detail of Sugar Refined and Unrefined, that actually crossed the Hansie Customs' Line.*

Year.	Refined.	Unrefined.	Total.
	Mds.	Mds.	Mds.
1868-69, ...	46,030	1,60,459	2,06,489
1867-68, ...	83,161	1,97,514	2,80,675
Corresponding 12 months of 1866-67, ...	96,788	2,63,261	3,60,049
Ditto, ditto, 1865-66, ...	84,817	2,01,741	2,86,558

(8) NOMINAL EXPORTS.—*Detail of Sugar, Refined and Unrefined, on which Duty was paid in the Hansie Customs-house.*

Year.	Refined.	Unrefined.	Total.
	Mds.	Mds.	Mds.
1868-69, ...	1,20,962	1,29,911	2,50,873
1867-68, ...	2,07,707	1,91,977	3,99,684
Corresponding 12 months of 1866-67, ...	2,30,824	2,53,199	4,84,023
Ditto ditto, 1865-66, ...	2,17,592	1,75,675	3,93,267

* To what extent the speculators in grain absorbed all available carriage, may be judged from the fact that in September and October sugar became so scarce in rear of the Line, that several large despatches of both the refined and unrefined article were *re-imported* from Bhewanee, it being found cheaper to sacrifice the duty that had been paid, than to compete with the grain traders for carriage to bring down fresh supplies from the eastward.

† It is asserted that this would have been greater but for the famine and prevalent sickness having *indirectly* operated to increase the consumption, while directly they checked it. Mortality has been very great; funeral feasts are a necessity, and sugar a necessary ingredient. Thus thousands, who but for these feasts would not have dreamt of buying sugar, which they could so ill-afford, were by a semi-religious necessity compelled to do so, even at the price of starving later.

HANSIE.

21. At these latter marts below Line, refined sugar seems to have averaged Rs. 10-9-2, and raw sugar Rs. 4-6-0; while at the first-mentioned marts above Line, the refined averaged Rs. 12-10-8, and the raw Rs. 4-13-6.

And of sugar.

THE DELHI DIVISION.

[*Length* 96½ *miles; Number of Guard-posts,* 193. *Superior Officers,* 14; *Petty Officers,* 123; *Privates,* 1,218; *total Establishment,* 1,355. *Annual average for the three years ending* 31*st March,* 1869: *Exports—Sugar,* 8,61,362 *maunds; Imports—Salt,* 11,73,850 *maunds.*]

DELHI.

GROSS REALIZATIONS.

22. In the Delhi Division, the collections (9) fell short by about one and a half lakhs of rupees, or nearly five per cent., of those for the preceding year.

Causes of decrease.

23. Here, too, the decrease was entirely in sugar. In salt there was an increase of some 2¼ per cent. During the first seven months of the year, there was an increase of nearly 30 per cent. in our imports, as compared with those of the previous year; but, under the pressure of the famine, and consequent diversion of carriage to routes less convenient for the return salt trade of this division than those usually taken, this increase dwindled monthly, till by the close of the year it reached the nominal figure above quoted. An unusual feature in the year's trade was the predominance of what is known by the Natives as "*poonjee,*" which means the trading on their own account by the owners of carriage. Usually, most of the Sooltanpore salt is conveyed from the works in hired carriage, on the account of great Delhi salt importers; but, during the past year, when the great pressure for fodder and the dearth of employment for cattle in agriculture began first to make itself felt in Hurriana, agriculturalists from that neighbourhood swarmed at the salt-works, lading their carts at their own cost, and making their way with their ventures to the remotest portions of Rohilkund and Eastern Oudh, where, disposing of their loads, some returned to repeat the journey, while many remained where they were (obtaining their livelihood by supplying local requirements), watching for better times at their far-off homes.

Unusual feature in the year's trade regarding carriage,

This, though it greatly stimulated trade for a time, led, amongst other things, in the long-run to a great diminution in the carriage available, and, before the year closed, the amount of this was so limited as to interfere most seriously with our imports.

which ultimately resulted in decreased imports.

24. It should be noted, also, that later in the year an unusual proportion of the cattle that remained were, in the neighbourhood of the central portion of the Delhi Line, taken up for irrigation. Every kind of crop was irrigated; crops that usually got no waterings were watered now, and those that usually got two or three, this year got almost a double numbear.

Moreover, cattle were largely taken up for irrigation.

25. The bulk of the salt that actually crosses (10) in this division, say fully seven-elevenths of the whole—and much larger proportion of what here pays

SALT.
Descriptions crossing in the division.

(9) *Gross Realizations of the Delhi Division.*

Year.	Salt.	Sugar.	Miscellaneous.	Total.
	Rs.	Rs.	Rs.	Rs.
1868-69, ...	26,97,725	3,53,628	4,989	30,56,342
1867-68, ...	26,39,113	5,61,711	6,724	32,07,548
Corresponding 12 months of 1866-67, ...	27,12,590	4,71,910	4,007	31,88,507
Ditto ditto, 1865-66, ...	19,04,294	5,24,144	4,814	24,33,252

(10) ACTUAL IMPORTS.—*Detail of Salts of all Descriptions that actually crossed the Delhi Line.*

Year.	Balumbha.	Sambhur.	Deedwana.	Sooltanpooree.	Salumbha.	Miscellaneous.	Total.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
1868-69, ...	27	2,62,333	86,454	7,13,197	83,435	4,000	11,49,445
1867-68, ...	34	2,53,413	1,10,476	7,31,512	61,748	3,913	11,61,096
Corresponding 12 months of 1866-67, ...	47	2,29,702	90,201	7,82,854	1,01,644	6,577	12,11,026
Ditto ditto 1865-66,...	108	2,06,553	1,22,328	5,71,968	86,093	4,458	9,91,509

duty (11)—is supplied by our own works at Sooltanpore. Over seven lakhs of maunds of this, two and a half of Sambhur, and eighty thousand odd maunds each of Deedwana and Noh salt, actually *crossed* the Delhi Line during the past official year, though much of the former paid *duty* at Hansie, with which the great Bhewanee traders are most closely connected in money transactions.

Posts at which each kind passes.

26. The Sambhur salt crosses chiefly in the western two-thirds of the division. Deedwana (the mart for which Bhewanee is nearest these) crossed only at the two westernmost, and Salumbha (the Noh works being nearest these) only at the four easternmost posts of the division. Sooltanpooree, the chief staple, crosses at the central posts from Jhujjur to Gurhee Hursroo, which lie immediately between Delhi and the works. Rewaree* and Bhewanee are the two chief marts whence the Sambhur salt that Delhi imports is derived, and Gurhee Hursroo and Sylanee, Beree, and Awul, posts that lie exactly between these marts and Delhi, naturally passed most of this salt.

Carriage

27. But little of this comes direct from the sources, but what does so is all carried by camels. The bulk of the Sambhur comes from the two abovenamed marts, and chiefly in carts; the Noh and Sooltanpooree salt comes direct from the works, by carts, camels, bullocks, and donkeys. The cost of carriage of course fluctuated,

and its cost.

and for short distances of less than ten miles was much higher, but, for trips of twenty miles and upwards, it seems to have varied from four-fifths to one and three-fifths pie per maund per mile, and to have averaged through the year by all means of conveyance about one and one-fifth pies.

Area of distribution

28. The salt imported through this division spreads far and wide; it permeates through the whole of Rohilkund and Western Oudh, and the Doab, and even reaches Mirzapore and its neighbourhood.

and mode of conveyance.

Partly by rail, and partly by carts and camels, the entire cost of carriage from Bhewanee is said to have been—to Furruckabad (180 miles), Rs. 1-4-0 per maund; to Lucknow (250 miles), Rs. 1-8-0; to Mirzapore (400 miles), Rs. 2.

SUGAR.
Decrease explained.

29. Th decrease in sugar calls for no special explanation. Short supplies, high prices, scant carriage, emigration of many of the consumers, the poverty of the rest, could produce no other result; the only matter of surprise being the comparatively small decrease in our exports. In the Delhi Division, a local cause tended *slightly* to counteract the adverse influences of the famine on our sugar trade. The only place in which sugar (and there only raw sugar) is produced outside our Line in Northern Rajpootana, is along the great Sahibee Nullah, the principal feeder of the Nujjeefgurh Jheel. Last year's drought entirely destroyed the crop there, and doubtless, thus, a little improved the feeble demand in Rajpootana.

(11) NOMINAL IMPORTS.—*Detail of Salt of all Descriptions on which Duty was paid in the Delhi Division of Customs.*

Year.	Balumbha.	Sambhur.	Salumbha.	Sooltanpooree.	Deedwana.	Black.	Total.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
1868-69, ...	10	74,259	1,35,824	6,85,599	3,488	62	8,99,242
1867-68, ...	32	70,917	1,00,354	7,07,316	1,078	8	8,79,704
Corresponding 12 months of 1866-67, ...	32	78,106	61,775	7,62,177	1,918	189	9,04,197
Do. Do. 1865-66, ...	89	60,628	29,883	5,41,204	2,698	262	6,34,764

* An octroi duty on both sugar and salt is levied, it appears, at Rewaree, at the rate of 1 per cent. I do not think that, if the fact is as stated, this should be allowed to continue. Elsewhere, almost throughout the Punjab, octroi on salt has been discontinued.

30. In sugar, here, as elsewhere, the falling-off was greatest in the refined (12) article, the export of which was some 37 per cent. (I refer to the actual exports, the nominal (13) ones differ widely); while that of raw sugar was only some 22 per cent. below that of the previous year. Some three lakhs of maunds of refined, and nearly four lakhs of unrefined sugar were exported from Delhi. Of the former, Rohilkund furnished about one and three-quarters lakhs; the Upper Ganges Doab, and the districts on the right of the Jumna, about half a lakh each; only 16,000 being furnished this year by the marts below Allahabad, which last year sent five times this quantity.

Compared with previous year's exports.

Sources of supply of refined

31. Of unrefined sugar, on the other hand, Rohilkund sent little (20,000 maunds); the Upper Ganges Doab sent two and a half lakhs of maunds; while the Western Jumna Districts, and the marts below Allahabad, furnished, the former somewhat more, the latter a little less, than half a lakh.

and unrefined sugar.

32. Two-thirds of the refined sugar, and more than half the raw, went to Bhewanee, and passed the Awul, Beree, and Jhujjur posts. The rest was despatched to Furrucknuggur, Rewaree, Ulwar, and Jaipore (all on one Line)* to the minor marts of Noh, Hutteen, Ferozpore (Zillah Goorgaon), Poonahana, or was absorbed for local consumption in the neighbourhood of the Line. Sugar, of course, travels by the same conveyance as salt, and the rates given for the carriage of the latter appear to be equally applicable to the former, except where this travels by rail, when these must be slightly enhanced; *e. g.*, sugar costs Rs. 2-8-0 per maund from Mirzapore to Bhewanee, salt costing only Rs. 2. Salt for the most part comes as an original investment; the return being rice, grain, and sugar.

Where the sugar goes to.

How conveyed, and at what rates.

33. The best Sóoltanpore salt seems to have averaged through the year about Re. 0-7-7 per maund at the works, and Rs. 4-5-2 at Delhi, but inferior qualities were much cheaper.

PRICES of Sooltanpore salt;

34. The *best* Noh salt seems to have averaged about 5 annas at the works, and Rs. 4-2-9 at Hattras, the chief depôt below Line; inferior qualities being cheaper.

of Noh salt;

35. Sambhur salt averaged above Line, at Rewaree, Rs. 1-12-0 per maund, and below Line about Rs. 5-8-0 per maund at Delhi, and Rs. 5-13-6 at Rohtuck and Gohana; while Deedwana stood at Rs. 4-13-9 at Rohtuck and Gohana. The best refined sugar seems to have averaged Rs. 11-4-0, and unrefined Rs. 4-2-6, at Delhi, during the past year, and Rs. 12-8-0 and Rs. 5-1-0 respectively at Rewaree; but inferior descriptions of refined sugar were selling at Bahadoorgurh and Nujjeefgurh, below Line, and Rewaree and Furrucknuggur, above Line, for Rs. 6-1-10 and Rs. 6-10-6, respectively.

of Sambhur above and below Line.

(12) ACTUAL EXPORTS.—*Detail of Sugar, Refined and Unrefined, which crossed the Delhi Customs' Line.*

Year.	Refined.	Unrefined.	Total.
	Mds.	Mds.	Mds.
1868-69, ...	2,96,513	3,89,633	6,86,146
1867-68, ...	4,72,059	5,02,440	9,74,499
Corresponding 12 months of 1866-67, ...	4,05,294	5,18,161	9,23,456
Ditto ditto 1865-66, ...	4,28,477	5,60,931	9,89,408

(13) NOMINAL EXPORTS.—*Detail of Sugar, Refined and Unrefined, on which Duty was paid in the Delhi Customs'-house.*

Year.	Refined.	Unrefined.	Total.
	Mds.	Mds.	Mds.
1868-69, ...	1,99,434	4,11,184	6,10,618
1867-68, ...	3,55,197	5,50,703	9,05,900
Corresponding 12 months of 1866-67, ...	2,64,267	5,53,718	8,17,985
Ditto ditto 1865-66, ...	2,94,573	6,12,189	9,06,762

* More than usual went this year to Rewaree, because many of the cross-roads between Bhewanee and Rewaree that lead into Rajpootana were absolutely closed by the want of water and fodder; hence with a decrease elsewhere, there was actually an increase in the exports of the Gurhee Hursroo post, at which the Rewaree road crosses our Line. With a railroad to Rewaree, nearly the whole trade of the division will take this route.

SALTWORKS AT NOH AND SOOLTANPORE.

36. This division contains the only two clusters of British works now open in Northern India for the manufacture of salt; both are some miles above or outside the Line, and special facilities therefore exist for preventing the introduction, untaxed, of their produce into our territories.

Increase in manufacture and sales at Noh.

37. Of these two clusters, it is to Noh that the past season has been most propitious. There has been a vast increase in manufacture, and no slight increase in sales, as the following figures will show:—

Year.	Amount in Store at commencement of year.	Amount Manufactured during the year.	Amount Sold during the year.	In Hand at close of year.
	Mds.	Mds.	Mds.	Mds.
1868-69, ...	3,94,158	2,86,083	2,44,297	4,35,944
1867-68, ...	4,93,732	1,06,545	2,06,119	3,94,158
1866-67, ...	4,27,366	1,65,345	98,979	4,93,732

Cause assigned.

38. The number of pans and wells remained the same as in the preceding year, but the unusually dry season greatly facilitated the removal of stocks to the rail, and stimulated manufacture, which was further encouraged by the continuous demand—which the failure of Sambhur in Bundelkund generated at Jubbulpore and elsewhere—for certain large crystalled kinds of the Noh salt, which can easily be and are coloured artificially (*vide* Muttra Review, paragraph 48) to resemble the lake-salt. Moreover, the works were peculiarly fortunate in the comparative cheapness of fodder throughout almost the whole length of the direct route between them and Hattrass—their most convenient, if not actually their nearest railway station.

Extension of railway communication has also developed trade in Noh salt.

39. To these causes, and the comparative cheapness of this good-looking though really somewhat inferior salt, is due the marked increase during the past year in the outturn and trade of the Noh works. Of course, during both the past and preceding year, the extension of railway communication has aided to develop the trade of these works. Their produce formerly chiefly found sale in Muttra, Allygurh, Bullubgurh, and Delhi; it now spreads through Rohilkund to Shahjehanpore, down the Doab to Allahabad, and thence even to Jubbulpore.

Average selling price.

40. The average selling price throughout the year of *all* qualities of this salt at the works is reported at 3½ annas per maund.

Stocks and sales of Sooltanpore salt compared.

41. It is, however, the Sooltanpore works which furnish the bulk of the salt in this division. The following table shows the outturn of sales and stock on hand of these works for the past as compared with previous year:—

The year a favourable one for manufacture.

Year.	Stock in Hand at commencement of year.	Manufactured during the year.	Sold during the year.	Stock in Hand at close of year.
	Mds.	Mds.	Mds.	Mds.
1868-69, ...	46,417	7,11,934	6,98,652	59,699
1867-68, ...	1,90,443	5,76,908	7,20,934	46,417
1866-67, ...	2,91,370	6,72,902	7,73,829	1,90,443

42. The year having been a very dry, and therefore, for salt-making, a favourable one, far more was manufactured than in the preceding ones; and although the sales fell short of those of the two preceding years, this was solely owing to the stocks in hand being exhausted. The extraordinarily heavy sales of the two preceding years had exhausted all old stocks, and during this year the new salt was sold as fast as it was ready. The returns show a balance of about half a lakh of maunds in hand when the year closed; but it must be remembered that most of this was fresh wet salt made during the last month of the year, on which purchasers could not afford to pay

DELHI.

duty until it was more or less desiccated by exposure to the air. The Hâkimee tax in many surrs still discourages outsiders from investing capital in extending the works, but this tax is to cease at the close of the current official year, and then a material extension of production may be looked for. The demand for this salt still continues brisk, and unless the manufacturers, misled by this, are induced to stick out for higher prices, there can be no doubt that (especially as soon as the now projected railway through the works is completed) the increase of sales from these sources will be very great. Their produce, as it is, sells (though often under other names) throughout the North-Western Provinces and Oudh, and the Delhi Division of the Punjab.

Hâkimee tax still prevents extension of works.

However, its cessation is imminent.

Demand for Sooltanpooree salt continues brisk,

and increased sales may be looked for.

THE MUTTRA DIVISION.

[*Length* 52½ *miles; Number of Guard-posts,* 105. *Superior Officers,* 7; *Petty Officers,* 67; *Privates,* 617; *total Establishment,* 691. *Annual average for the three years ending* 31*st March,* 1869: *Exports—Sugar,* 2,46,531 *maunds; Imports—Salt,* 5,21,211 *maunds.*]

MUTTRA.

43. In Muttra, the collections (14) were two and a quarter lakhs of rupees ahead of those of the preceding year, and, in fact, almost equalled the revenue of former years, before direct railway communication with Delhi and Agra had so seriously affected the Muttra trade.

GROSS REALIZATIONS exhibit an increase, compared with last year,

44. The gain was entirely in salt, in which the increase was 22·35 per cent. on the revenue of the preceding year.

in salt alone;

In sugar the falling-off was great, nearly 31 per cent., as compared with 1867-68.

sugar showing a deficit.

45. In reality, besides the five lakhs odd of maunds of salt for which Muttra has credit (15), close upon another lakh crossed (16) its Line, duty for which was paid at Agra and Delhi, and consequently credited in the accounts of those divisions.

Actual imports exceed nominal.

46. The increase in the salt revenue of this division is attributed to the facility of obtaining carriage, consequent on the numbers of agricultural cattle thrown out of employ; the existence of abundant supplies (the result of long-continued drought) at the neighbouring sources of Noh and Bhurtpore; the improved state of the roads; and *comparative* cheapness of fodder. The increase (16) was entirely in Bhurtpore and Noh salt. Sambhur, cut off by wide, waterless, and fodderless tracts, fell off by more than

Cause of increase, which was entirely in Bhurtpore and Noh salt.

(14) *Gross Realizations of the Muttra Division.*

Year.	Salt.	Sugar.	Miscellaneous.	Total.
	Rs.	Rs.	Rs.	Rs.
1868-69, ...	15,24,893	1,14,262	2,001	16,41,156
1867-68, ...	12,46,257	1,65,549	1,246	14,13,052
Corresponding 12 months of 1866-67, ...	14,19,719	1,53,912	1,622	15,75,253
Ditto ditto 1865-66, ...	15,13,724	1,66,276	854	16,80,854

(15) NOMINAL IMPORTS.—*Detail of Salts of all Descriptions on which Duty was paid in the Muttra Customs'-house.*

Year.	Balumbha.	Sambhur.	Salumbha.	Miscellaneous.	Total.
	Mds.	Mds.	Mds.	Mds.	Mds.
1868-69, ...	4,17,788	23,689	66,422	399	5,08,298
1867-68, ...	3,42,225	25,429	47,739	26	4,15,419
Corresponding 12 months of 1866-67,	4,25,833	24,916	22,439	51	4,73,229
Ditto ditto 1865-66,	4,42,739	29,074	32,742	20	5,04,575

(16) ACTUAL IMPORTS.—*Detail of Salts of all Descriptions that actually Crossed the Muttra Line.*

Year.	Balumbha.	Salumbha.	Sambhur.	Miscellaneous.	Total.
	Mds.	Mds.	Mds.	Mds.	Mds.
1868-69, ...	4,01,022	1,76,185	21,102	13	5,98,323
1867-68, ...	3,46,625	1,47,260	33,161	26	5,27,072
Corresponding 12 months of 1866-67,	4,67,454	12,201	44,954	3	5,24,611
Ditto ditto 1865-66,	4,56,679	3,649	46,867	19	5,07,214

one-third. The drought, that in some divisions depressed consumption in the latter half of the year as much as it stimulated import in the earlier part, here benefited our trade throughout. It was not only that manufacture had been rendered specially successful, and stocks abundant at sources near to the Muttra Line, but neither Muttra itself, nor the greater portion of the country supplied across its Line, suffered much from the scarcity; while the great demand for grain which this latter engendered west of Muttra, and the sources from which its supplies were chiefly drawn, ensured plentiful and cheap return carriage for the transport of salt from these sources. Fodder was even scarcer in Rajpootana than grain, and immense quantities of cotton-seed were exported for cattle-food, all of which aided to increase the carriage available for salt traffic *towards* Muttra.

Scarcity in Rajpootana aided the import of salt in this division.

Fodder, though scarce, procurable in Muttra.

47. In the neighbourhood of Muttra itself, too, fodder, though selling as dear as 30 seers* for the rupee, was still procurable, and cattle-owners from a distance came and engaged in the Muttra salt trade, avowedly not because any large profits were realizable (each bullock costing six annas a-day for food even here), but because they were thus just enabled to keep their cattle alive for happier times.

Suspension of Bunjara traffic lower down the Line also tended to increase Muttra imports.

48. In yet another manner did the drought stimulate the Muttra trade. The entire absence of herbage impeded, and in places entirely suspended, the Bunjara traffic, which supplies Jhansie, Saugor, and the country east of the Line in these divisions, with Sambhur and Puchbuddra salt. The rail, linking Jubbulpore with Muttra, rendered it possible for the merchants of the former partly to supply the blank from the marts of the latter; and the Malub works at Noh, producing a large-crystalled though somewhat impure salt, that can be *easily coloured* with a little indigo and Mooltanee muttee *to resemble* Sambhur, the Jubbulpore traders established agencies at Hattrass for the purchase and despatch of this salt, which has this year for the first time, although in disguise, largely supplied the wants of Bundelkund, and penetrated even to marts immediately in rear of the Hoshungabad Line.

Falling-off in sugar due to partial failure of crops in British territory, as well as to distress amongst consumers.

49. In sugar, the falling-off was due, not only to the distress existing amongst the consumers, but also to the partial failure of the crop over a large portion of the tract which supplies the Muttra exports. The decrease was chiefly in refined sugar, amounting in this article to nearly (17) 37 per cent., while in goor it was less than 16 per cent. (I refer to the actual exports, the nominal ones differ (18) widely). It is observed that an insufficient supply of water leads to the production of cane-juice yielding a very small proportion of crystallizable sugar. Sugar-cane, Mr. Jones remarks, in the Central Provinces is always imperfectly irrigated; and there, as is well known, little but goor can be made from the juice. Canal-irrigated cane, which usually is abundantly watered, yields notoriously a larger proportion of sugar than the ordinary cane

(17) ACTUAL EXPORTS.—*Detail of Sugar, Refined and Unrefined, which Crossed the Muttra Customs' Line.*

Year.	Refined.	Unrefined.	Total.
	Mds.	Mds.	Mds.
1868-69, ...	70,210	1,45,913	2,16,123
1867-68, ...	1,10,746	1,74,123	2,84,869
Corresponding 12 months of 1866-67, ...	97,316	1,51,463	2,48,779
Ditto ditto 1865-66, ...	90,207	1,84,400	2,74,607

(18) NOMINAL EXPORTS.—*Detail of Sugar, Refined and Unrefined, on which Duty was paid in the Muttra Customs'-house.*

Year.	Refined.	Unrefined.	Total.
	Mds.	Mds.	Mds.
1868-69, ...	65,775	1,29,298	1,95,073
1867-68, ...	1,10,595	1,46,542	2,57,137
Corresponding 12 months of 1866-67, ...	1,06,763	1,25,731	2,32,494
Ditto ditto 1865-66, ...	1,04,270	1,65,349	2,69,619

* At the Noh surrs the rate was as high as 20 seers per rupee.

in the same localities. Even such crops as came to maturity seem to have been everywhere affected by the drought, and to have yielded, in consequence, a much smaller proportion of sugar, and a larger proportion of goor than usual. It was not only, of course, the want of rain that so largely diminished the breadth of even partially successful cane-cultivation; in many places the pressure for food was so great that canal-irrigation, insufficient for both staples, had to be rigidly restricted to grain-crops, while in many places the more or less stunted cane was utilized as fodder.

SALT.

50. The great bulk of the salt imported in this division is Bhurtpore salt, of which about four lakhs of maunds paid duty at its Customs'-house, against one and three-quarters lakhs of Noh salt, and one-quarter of a lakh (chiefly Sambhur) of other descriptions.

Bhurtpore forms the bulk of the salt imported.

Posts at which salt passes.

51. One post, Sitoha, passes three and a quarter lakhs of Balumbha, Chowmoha one-half, and Tarsee one-quarter of a lakh of the Salumbha; Chowmoha, Chatta, and Kosee passed respectively rather more than three-quarters, one-half, and one-quarter of a lakh of maunds.

Sambhur

52. What little Sambhur is imported comes from the marts of Ferozpore, (Zillah Goorgaon) and Poonahana (or even, in more prosperous seasons, Jaipore itself), and is absorbed for the local consumption of Muttra, Bindrabun, and the country in the immediate proximity of the Line. The Salumbha salt comes direct from the works at and near Noh, and passes to Allygurh and Hattrass, whence it is taken by rail eastwards, as far down even as Jubbulpore.

and Salumbha, whence imported and where consumed.

Muttra imports increased, owing to scarcity of fodder in the Delhi Division.

53. During the past year, more of it came through the Muttra, and less through the Delhi Division than it would otherwise have done, owing to the greater scarcity of fodder on the Hodul, Pulwul, and Sylanee routes, than on those leading to Chatta and Chowmoha of Muttra.

Places of manufacture

54. The Bhurtpore salt is chiefly derived from Buddungurh, Koombher, and Deeg, and while a portion of this salt, as well as of the Salumbha, is locally consumed, the bulk of it passes to Oudh (as far east as Fyzabad), Rohilkund (where Bareilly is perhaps the chief mart for the Muttra supplies), and the Central and Lower Doab.

and of consumption of the Bhurtpore salt.

CARRIAGE.

55. Carts, camels, ponies, bullocks, and donkeys are employed in the traffic to the Line and the marts immediately below it; but beyond this, the rail, wherever it is possible, is had recourse to.

SALT travels as an original investment,

56. Salt comes and goes, both as a return freight and an original investment, but there is always a steady return current of trade; and carriage that takes salt one way, finds full employment in transporting sugar, rice, grain, piece-goods, tobacco, alum, cotton-seeds, wrought-brass, iron, spices, and indigo, the other.

and the return carriage transports sugar, &c.

Analysis of freight.

57. A careful analysis of the freights, to and from the principal marts commercially connected with our six posts in this division, shows that the cost of carriage per maund of salt per mile, whether by carts or beasts of burthen, over earthen roads or village-tracks (or even metalled roads for distances not exceeding 40 or 50 miles), varied during the past year from one and one-eleventh to one and seven-elevenths pie, one and one-third being the ordinary rate for all journeys in reasonable proximity with the Line, and one and one-half for distant marts like Jaipore. For longer distances along roads metalled throughout, such as those leading to Fyzabad, Bareilly, Khasgunge, Shahjehanpore, &c., the rates varied from two-thirds to one pie per mile, the longest journeys being the cheapest.

SUGAR, whence supplied;

58. Ghazeepore, Jounpore, Oudh, Rohilkund, and the Upper Ganges Doab, supply the sugar exported across the Muttra Line, the two latter being the chief contributors; but we are unable to gauge accurately the proportion of the supply derived from various sources, since the exporters buy *en masse* at great marts, and are generally entirely ignorant as to the actual places of production of their purchases. Above Line, the Muttra sugar proceeds to numerous marts, in British and foreign territory—

where it goes to.

Rate of carriage for salt and sugar nearly equal.

Fer zpore (Zillah Goorgaon), Bhurtpore, Suhar, Gobhurdhun, Koombher, Ukkagurh, Nuggur, Sonk, and Jaipore, being the principal ones. Greatly as the value of sugar exceeds that of salt, the cost of carriage by carts and beasts of burthen is here much the same; the maund of salt goes from Chowmoha to Fyzabad, some 310 miles, for Re. 1, and the maund of sugar comes back at a like cost. The maund of sugar costs Rs. 1-2-0 from Sitoha to Jaipore, some 140 miles, and the maund of salt pays the same freight for the return trip. The Bhurtpore State, it is said, levies a duty of four annas on refined, and two annas on raw sugars, after their export across our Line, but this does not seem in any way to affect the trade.

PRICES.

SALT, above and below Line.

59. The price of average Bhurtpore salt has varied at Deeg and Koombher, the most important marts above Line for this staple (so far as Muttra is concerned), from Rs. 1-1-6 to Re. 0-10-6 per maund, the average having been Re. 0-12-9½. The price of the same salt has varied at Muttra from Rs. 3-13-0 to Rs. 4, the average being Rs 3-14-0; and at Hattrass from Rs. 4 to Rs. 4-5-6, the average being Rs. 4-0-4. The price of the Noh salt of all qualities varied at the works from Re. 0-2-8 to Re. 0-8-0, and averaged only Re. 0-3-4½; while at Hattrass, the chief mart below Line for this article, the average for the year has been Rs. 4-0-6. Sambhur, which at Ferozpore (Zillah Goorgaon) above Line, has averaged Rs. 1-9-4, has at Muttra and Hattrass, below Line, averaged Rs. 5-13-7.

SUGAR, above and below Line.

60. The price of sugar varied much during the year, but refined sugar averaged Rs. 10-5-8 at Muttra, and Rs. 8-9-7 at Hattrass (where the rail is near, and there is no octroi); while at Deeg, Gobhurdhun and Ferozpore, above Line, after paying our duty, it averaged Rs. 11-15-0. Unrefined sugar averaged Rs. 4-2-4 at Muttra, and Rs. 3-11-3 at Hattrass; while at the three above mentioned marts above Line it averaged Rs. 4-15-0.

THE AGRA DIVISION.

[*Length* 105 *miles; Number of Guard-posts,* 209. *Superior Officers,* 12; *Petty Officers,* 118; *Privates,* 1,127; *Total Establishment,* 1,257. *Annual Average for the three years ending the* 31*st March,* 1869: *Exports—Sugar,* 4,05,389, *maunds; Imports—Salt,* 9,42,645 *maunds.*]

AGRA.
GROSS REALIZATIONS.

61. In the Agra Division there was a decrease (19) of less than one-half per cent. in the collections of the past as compared with the previous year.

Comparative decrease.

Here, too, the loss was entirely in sugar. In salt there was an increase of over Rs. 63,000, or 2·17 per cent.; while in sugar the loss amounted to Rs. 80,000, or 21·38 per cent.

SALT, whence chiefly supplied.

62. This division is *chiefly* supplied (20) with salt by Bhurtpore; and the stocks there were low when the year opened, and prices high, owing to unfavourable weather having

(19) *Gross Realizations in the Agra Division.*

Year.	Salt.	Sugar.	Miscellaneous.	Total.
	Rs.	Rs.	Rs.	Rs.
1868-69, ...	29,60,061	2,96,478	5,784	32,62,323
1867-68, ...	28,96,994	3,77,112	3,642	33,77,748
Corresponding 12 months, 1866-67, ...	33,16,932	2,28,153	2,292	35,47,377
Ditto ditto, 1865-66, ...	27,40,829	2,63,700	6,123	30,10,652

(20) NOMINAL IMPORTS.—*Detail of Salt of all Descriptions on which Duty was paid in the Agra Division.*

Year.	Balumbha.	Sambhur.	Salumbha.	Sooltanpooree.	Miscellaneous.	Total.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
1868-69, ...	7,56,520	1,84,708	44,631	825	2	9,86,636
1867-68, ...	7,16,963	1,71,658	62,344	14,696	3	9,65,664
Corresponding 12 months of 1866-67, ...	9,09,142	1,58,891	28,114	9,471	26	11,05,644
Do. do. 1865-66, ...	7,49,584	1,33,717	23,053	7,175	80	9,13,609

(almost throughout 1867-68), impeded manufacture. Our imports were consequently depressed throughout the first quarter; but during that period manufacture had been peculiarly brisk, prices *fell*, and towards the end of June a sudden re-action took place, and, encouraged by the continual drought throughout July, August, and September, supplies, enormous for the time of the year, poured in; so that the first half-year closed with a surplus of three and a half lakhs. After this trade slackened, the surplus slowly dwindled,* and the year closed with an excess of little more than half a lakh in salt, as compared with the previous year.

Fluctuations explained.

63. Some 50,000 maunds of salt, that paid duty (21) in this division, actually crossed the Line in the Delhi, Jhansie, and Muttra Divisions; being, however, considerably less than this Customs'-house similarly obtained credit for during the previous year.

Nominal and actual imports differ;

64. Hence, although the *collections* were but little ahead of those of 1867-68, the *amount of salt* that actually crossed (21) this portion of the Line was nearly 9½ lakhs of maunds, against 8¾ in the preceding year.

the actual imports being in excess of last year's.

65. Bhurtpore and Sambhur are the only staples that cross here. Both show an increase—the former of 6·1 per cent., from 7,15,110 maunds to 7,61,626 maunds, the latter of 12·86, from 1,57,013 maunds to 1,80,307 maunds. From April to June comparatively little was done in Bhurtpore salt; but during the exceptionally dry months of July, August, and September, carriage of all descriptions—usually at that time absorbed in agriculture—became available in unexampled profusion. The cost of carriage from Bhurtpore to Agra per pulla of three British maunds, fell from Rs. 1-2-0 to seven annas, and a larger quantity was imported than in the corresponding quarter of *any previous* year on record. After that, carriage again rose to a little above its former rate, and the trade slackened: Although the import of Balumbha salt exceeded by some 6 per cent. that of the previous year, it fell short of that of 1866-67 by nearly 14 per cent., and only exceeded that of 1865-66 by 2 per cent. It was, therefore, a mere fluctuation; not so the increase in Sambhur, the import of which exceeded that of 1867-68 by nearly 13 per cent., of 1866-67 by 22 per cent., and of 1865-66 by 37½ per cent. For years past, in fact ever since the railway opened to Agra, there has been a steady development of the Sambhur salt trade, and great abundance of carriage, attracted by the grain trade to Jaipore, and almost debarred by the want of water and fodder from taking the (in the case of the camels) more customary northern route, prevented any of the adverse influences at work during the past year from checking even temporarily this growth.

Kinds of salt imported.

Increase of the Bhurtpore trade due to profusion of carriage.

Continued increase in the Sambhur trade.

66. In sugar (22) the decrease was chiefly in the refined article, in which it amounted to 44½ per cent., whereas in raw sugar it fell short of 8 per cent.

SUGAR.
Decrease *chiefly in refined.*

(21) ACTUAL IMPORTS.—*Detail of Salts of all Descriptions that actually Crossed the Agra Customs' Line.*

Year.	Balumbha.	Sambhur.	Miscellaneous.	Total.
	Mds.	Mds.	Mds.	Mds.
1868-69, ...	7,61,626	1,80,307	2	9,41,936
1867-68, ...	7,15,110	1,57,013	...	8,72,123
Corresponding 12 months of 1866-67, ...	8,66,807	1,40,615	2	10,07,423
Ditto ditto, 1865-66, ...	7,40,968	1,12,812	1	8,53,780

(22) ACTUAL EXPORTS.—*Detail of Sugar, Refined and Unrefined, which Crossed the Agra Customs' Line.*

Year.	Refined.	Unrefined.	Total.
	Mds.	Mds.	Mds.
1868-69, ...	1,98,139	2,62,216	4,60,354
1867-68, ...	2,86,552	2,41,479	5,28,031
Corresponding 12 months of 1866-67, ...	1,65,790	1,66,292	3,32,082
Ditto ditto 1865-66, ...	1,70,616	2,48,208	4,18,824

N. B.—The nominal exports in this Division correspond with this table.

* Dearness of fodder had something to do with this. Even on the main road from Bhurtpore to Agra this sold at from 35 to 40 seers per rupee; and during the cold weather, multitudes of carts betook themselves to tracts east of the Jumna and Ganges, where, although the rates of hire were lower, the net profits consequent on the cheapness of fodder were higher.

AGRA.

Causes previously noticed, besides dacoities in Gwalior, tended to depress trade.

67. The same causes operated here, as elsewhere throughout Northern India, to depress the sugar trade; but besides these, the occurrence of numerous dacoities in the Gwalior territory, and between Gwalior and Indore—in some of which as many as seven and eight camels loaded with sugar, &c., were carried off—has tended to check that portion of the sugar trade which passed from Dhimsuree to Jeitpore, and worked its way southward, avoiding the great thoroughfares by numerous cross-country tracks.

Posts at which Bhurtpore salt passes.

68. Nearly 99 per cent. of the salt imported in this division crossed at the Bichpooree post, where the main metalled road from Jaipore and Bhurtpore traverses the Line. Were a line of rail opened, it is doubtful whether 1,000 maunds would anywhere cross the rest of this division of the Line.

CARRIAGE.
Cost

69. The average cost, it appears, per maund during the past year, of conveying salt from the Sambhur lake (148 miles), was Re. 1* (or over one and one-third pie per mile); from Jaipore (108 miles), 14 annas (or one and five-ninths pie per mile); and from Bhurtpore† (thirty miles), four annas (or one and three-fifths pie per mile); but these rates were subject to violent fluctuations, and during the past year have risen as high as two and two-thirds pie, and fallen as low as eight-ninths of a pie per maund per mile.

and means of transport.

70. Carts, camels, bullocks, and donkeys, though chiefly the former two, are all employed in this trade. Sugar, grain, bamboos, and a variety of other articles, go to, or near, the salt-sources by the same carriage that brings in the salt; bullocks and donkeys, however, often bring in salt and return unladen.

Cotton competes with salt for carriage.

71. At the same time, it should be noted that cotton competes during the cold weather largely, in this division, with salt for carriage towards the Line, and that a rise of two or three rupees in the price of cotton in Calcutta, often for a time seriously affects the Agra salt imports.

Distribution of salt supplies.

72. The salt here imported spreads over the whole Doab, Rohilkund, Oudh, Mirzapore, and Ghazeepore, a little having already begun to find its way to Bundelkund.

SUGAR.
Posts at which it crosses.

73. Unlike salt, virtually concentrated on a single Line, sugar finds its way southwards in considerable quantities by every one of the eleven posts comprised in this division, the greatest quantity, crossing at Bichpooree and Kukoobah, supplied by Agra, and the next most important, *now* being Burhpoora, supplied from the new mart I established at Etawah.

Whence supplied chiefly.

74. It is from the eastern marts—Allahabad, Benares, and Mirzapore—that the great bulk of the sugar that is exported through this division is derived.

At most, 25 per cent. of the Agra exports are furnished by Rohilkund and the Upper Doab.

Whence exported.

75. Almost the whole of the refined sugar finds its way in bulk to Bhurtpore, Kurrowlee, Gwalior, Dholepore, Jhalrapaten, Indore, and Jaipore, and much of the raw sugar also goes direct to all but the two latter marts; but the major portion of this branch of the export trade is in the hands of petty traders, who, with one or two bullocks, their own property, convey the goor by cross-roads just across the frontier into foreign territory,‡ whence it is again pushed on from time to time as required. Except by rail, where the charges are higher, the cost of the carriage of sugar seems to average the same as that of salt.

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* The charges for grain the other way were at least 50 per cent. higher.

† Practically the whole of the salt imported in this division comes direct from these three places. Looking at the map, Gwalior, a considerable salt depôt, would seem fully as convenient a mart for the eastern posts; but the duties levied in the Gwalior territory prevent the Sirsagunge, Juswuntnuggur, Etawah, and Lucknow merchants from having recourse to it.

‡ In this manner they generally manage to evade the Customs' dues of the various Native States.

JHANSIE.

PRICES.

Salt.

76. At Futtehpore Sikree, and similarly-situated bazaars above Line, Balumbha salt may have averaged Rs. 1-4-0 per maund, and in the neighbourhood of Agra itself, below Line, Rs. 4-6-0, while at the same places Sambhur averaged perhaps Rs. 3 and Rs. 6; but there are a *great* number of small marts on either side of the Line, and prices not only fluctuated from month to month everywhere, but varied in contiguous depôts very remarkably, and (supposing our information correct) somewhat inexplicably.

Sugar.

77. In sugar, owing probably to the great differences in the qualities of the articles lumped up under the two heads "refined" and "raw" sugars, the variation in prices as reported are so great as to render their quotation here in detail useless; and I shall only note that the average for the year of numerous marts within twenty miles above and below Line, is for the latter Rs. 12 for refined, and Rs. 5 for raw, and for the former, Rs. 14 for refined, and Rs. 6-4-0 for raw sugar, per maund.

THE JHANSIE DIVISION.

[*Length* 172 *miles*; *Number of Guard-posts*, 344. *Superior Officers*, 14; *Petty Officers*, 220; *Privates*, 1,634; *Total Establishment*, 1,868. *Annual average for the three years ending the* 31*st March*, 1869: *Exports—Sugar*, 1,43,774 *maunds*; *Imports—Salt*, 1,27,357 *maunds*.]

JHANSIE.

GROSS REALIZATIONS. Comparative decrease.

78. The income (23) of the Jhansie Division fell short by very nearly 32 per cent. of that of the preceding official year; and, unlike any of the divisions as yet noticed, the loss here was heaviest in salt. Of this latter, the import fell short by 36½ per cent., or more than one-third of the previous year; while in sugar, the decrease was only some 14½ per cent.

SALT. Sambhur, the chief import,

is carried exclusively by Bunjaras, who this year came in diminished numbers;

79. Sambhur and Kansia (24)—tenth-elevenths of the former, one-eleventh of the latter—are the only salts that cross in this division, and little but Sambhur here pays (25) duty. They come to marts in the immediate proximity of the Line, direct from the lake and the Puchbuddra works, and are carried exclusively by Bunjara bullocks. During the past year, the scarcity of fodder along the routes usually traversed has seriously impeded the import. The Bunjaras usually make two trips in the year, coming first in January, and again in April and May. This year, only half the usual number of Bunjaras came in January, and of these, the cattle were so exhausted that, instead of returning for a second supply, they dispersed in search of fodder. No second supply, therefore, could

(23) *Gross Realizations of the Jhansie Division.*

Year.	Salt.	Sugar.	Miscellaneous.	Total.
	Rs.	Rs.	Rs.	Rs.
1868-69, ...	2,33,237	77,858	2,868	3,13,963
1867-68, ...	3,67,301	91,196	2,131	4,60,628
Corresponding 12 months of 1866-67, ...	4,12,790	73,189	1,019	4,86,998
Ditto Ditto 1865-66, ...	3,64,800	91,130	2,266	4,58,196

(24) ACTUAL IMPORTS.—*Detail of Salt of all Descriptions that actually Crossed the Jhansie Line.*

Year.	Sambhur.	Kansia.	Miscellaneous.	Total.
	Mds.	Mds.	Mds.	Mds.
1868-69, ...	77,824	7,757	28	85,608
1867-68, ...	1,25,461	235	68	1,25,784
Corresponding 12 months, 1866-67, ...	1,45,241	3	152	1,45,396
Ditto ditto 1865-66, ...	1,29,584	...	243	1,29,828

(25) NOMINAL IMPORTS.—*Detail of Salt of all Descriptions on which Duty was paid in the Jhansie Customs'-house.*

Year.	Sambhur.	Miscellaneous.	Total.
	Mds.	Mds.	Mds.
1868-69,...	77,161	584	77,745
1867-68,...	1,22,372	62	1,22,434
Corresponding 12 months, 1866-67, ...	1,37,251	345	1,37,596
Ditto ditto 1865-66, ...	1,21,223	377	1,21,600

consequently prices rose,

be looked for, and prices rose in Jhansie (now a foreign town above Line) to Rs. 3-14-0, and in our own territories immediately below Line, adjacent to this mart, to Rs. 7-6-0 per maund. These prices have had the effect of retaining what little *salt* was here imported for the consumption of a narrow belt of country, say thirty miles wide, immediately in rear of the Line, leaving Mhow, Banda, and other more distant marts which usually draw their supplies through this division, to obtain them by boat from Agra, and by rail through Futtehpore, Jubbulpore, &c., thereby benefiting, of course, the Muttra and Agra Divisions. Thus, it happens that during the past year, Calpee, Mhow, Banda, Mahoba, and Chutterpore, have all been supplied with rail or river-borne salt ; but this, as the Collector correctly states, must not be accepted as proving that the Bunjaras have been as yet entirely beaten out of the field. Once let the grass grow again, and the Bunjaras will flood Jhansie with comparatively cheap salt, much of which will probably continue to find its way into the country of which the abovementioned towns are the leading salt marts, and temporarily at least drive back the rail-borne staples within something like their former limits. This shortness of supply at Jhansie has been a more than ordinarily severe loss to this division. Had there only existed large stocks here above Line, *any* amount might have been disposed of in the eastern marts, to which it could have been conveyed at almost nominal rates of freight—thousands of carts from Lucknow, Cawnpore, Banda, &c., which reached Jhansie laden with grain, having returned empty for want of freight.

and the trade of this division passed through Agra and Muttra.

With a better season, the Bunjara trade will revive.

Deficient supply at Jhansie a severe loss to the Division;

but its indirect effect has been to check smuggling.

80. One curious indirect effect of this scarcity of salt has been to check smuggling, which otherwise we should have expected to be rampant. When salt is Rs. 2-8-0 above, and Rs. 5-12-0 below Line, the smuggler still makes a good profit, some six annas per trip if he succeeds in running one out of two ventures; but when salt is Rs. 3-14-0 above, and Rs. 7-2-0 below, he gains little more than three and a half annas per trip, even if he manages to pass four out of every seven investments!

Distress prevented, and contraband trade checked by relief works.

81. Notwithstanding this fact, however, the distress was so severe, and local facilities for smuggling so great, that a serious increase in contraband trade would doubtless have resulted but for the relief works, so opportunely commenced and vigorously carried on in this division.

Famine not the sole cause of the check to the Bunjara trade,

82. It was not, however, the famine only which checked the Bunjara trade; the contractors of the Gwalior Customs aided materially to diminish this. The Bunjaras had always paid a duty of Re. 1 per laden bullock at the Sheopore Chowkee, on the Chumbul. The bullock-load was computed at three maunds, and the duty was therefore supposed to be Re. 0-5-4 per maund; but for many years past the Bunjaras have always been in the habit of re-arranging their loads just before reaching the chowkee, so as to pass four maunds to each bullock. Last year, the Contractor suddenly announced his intention of levying the duty at Rs. 0-5-4 *per maund;* and, proceeding to enforce this in April and May, 1868, when the Bunjaras arrived, many of these refused to pay the toll, and turned backwards, passing in the Agra Division. However, when the few straggling January despatches arrived, the Bunjaras themselves asked to be allowed to pay by weight, as their exhausted bullocks were most of them carrying barely two maunds, but this time the Contractor insisted on the full Re. 1 per laden bullock! This, again, sent several parties away. Of course this is no concern of ours, but it has operated still further to depress the trade of the division. Lastly, there is no doubt that the prevailing famine, which has been very severe in many places in rear of this division, combined with high prices, has diminished consumption, and compelled the people to stint themselves and their cattle;* while it has caused the almost wholesale emigration to Malwah of the people of Tehree and other Native States below Line, where our taxed salt was consumed in former years.

as increased taxation on the part of the Gwalior Contractor,

also operated to depress it.

* The scarcity of fodder was very great. 1,000 small bundles of grass were selling last year in the interior of the Jhansie District for 4 annas; during the early part of the present year, the same number of handfuls (for they are little more) of inferior grass sold for Rs. 3 !!

JHANSIE.

Returns show an increase in the Kansia salt trade.

83. In Kansia salt there appears, by the figured returns, to have been a very material increase; but this is nominal, being due to the transfer to this division of the Goonan post, at which fourteen-fifteenths of this salt passed, and which was formerly attached to Saugor.

SUGAR.

84. In Sugar, here, as elsewhere, the falling-off was in the refined (26) article, the decrease in this slightly exceeding one-fourth; on the other hand, in the unrefined sugars there has been an increase of somewhat less than one-tenth.

COURSE OF TRADE.
Salt.
Posts at which it passes.

85. Sambhur enters, in larger or smaller quantities, at every post in the division; but fully two-thirds of our imports cross in the Jhansie beat, whence, more or less, good roads (convenient for its distribution inside the Line) radiate, the majority of the posts only importing what is required for consumption in their own immediate neighbourhood. At Lullutpore, the penultimate post of the division, a little Kansia crosses the Line; and this is practically the first post, counting from the banks of the Sutlej, where this beautiful salt (which has so much, in the way of distance of source, bad roads, and taxation in Native States, to contend with) is able to make head against Lahoree, Deedwana, Sooltanpooree, Salumbha, Balumbha, and Sambhur, one or more of which, in all parts of the Line to the north and west, undersell it and bar its import.

Kansia salt;

86. In Goonah, the next and most southern post of the Jhansie Division (transferred during the past year from Saugor to make our divisions conterminous with the administrations to which they are subordinate) little but Kansia passes.

whence purchased by our traders.

This salt comes direct from the works to the marts of Khoray and Khimlasar, whence our traders purchase it.

CARRIAGE monopolized by Bunjaras up to the Line, beyond which other means of conveyance are employed.

87. The Bunjaras enjoy a practical monoply of the carriage of salt up to or *nearly* up to the Line; but in most cases they deposit the salt in marts just above Line, which they do not themselves cross, and from these marts it is brought by bullocks, ponies, donkeys, and carts, across the Line; carts taking most of that intended for marts more than ten miles below Line. The cost of carriage from the works to the immediate vicinity of the Line averages about one pie per maund per mile; onwards from Jhansie to Mow, Pirtheepore, Mahoba, Chutturpore, Ulleepoora, Nayahgaon, &c., its average cost per mile by carts seems to be about nine-tenths of a pie per maund.

Cost of carriage.

Sugar;
supplies whence drawn.

88. Mirzapore, the marts of Rohilkund, and Cawnpore (which draws much of its supplies from Oudh), furnish the sugar exported across this division. This finds its way by the northern posts to Gwalior, Duttiah, Sumpthur, and Jhansie, and by the more southern posts to Oujein, Kotah, Indore, Rutnam, Puttun, and Mundesore. Here, as elsewhere, the cost of conveying sugar seems to be much the same as that of carrying salt.

Salt generally, and sugar sometimes, goes as an original investment.

89. Salt generally comes as an original investment—sugar, spices, cloth, and the like being the return freight; but not unfrequently the salt carriage returns empty, and sugar occasionally returns by camels, &c., that have brought iron from Gwalior, or goes as an original investment, its carriage returning laden with ghee, cotton, or a red ochreous earth used largely in dyeing the coarser Native fabrics.

The trade of this division will probably decline in future years.

90. The trade of this division will probably greatly decline. Even in favourable years, salt, Bunjara-carried, *cannot* well reach Jhansie under Rs. 2-4-0 a maund, including the price at the sources, transit duties in Native States, and the Bunjara's own moderate profit of Re. 1, which is little more than half a pie per maund for each mile

(26) ACTUAL EXPORTS.—*Detail of Sugar, Refined and Unrefined, which Crossed the Jhansie Customs' Line*

Year.	Refined.	Unrefined.	Total.
	Mds.	Mds.	Mds.
1868-69, ...	47,295	81,491	1,28,786
1867-68, ...	63,341	74,272	1,37,613
Corresponding 12 months of 1866-67, ...	52,429	55,354	1,07,783
Ditto ditto 1865-66, ...	62,222	77,082	1,39,304

N. B.—The nominal exports in this division correspond with this table.

that he carries his goods. This salt cannot, therefore, well be sold, even immediately in rear of the Line, for less than Rs. 5-10-0 per maund; and at this price its dissemination to any distance will sooner or later be barred, I apprehend, by rail and river-borne Soultanpooree, Noh, and Bhurtpore salt, not to mention Kokan, as soon as the G. I. P. Line to Jubbulpore is completed.

Cesses levied in Native States injure trade.

91. The trade of this division suffers more from the cesses levied in Native States than any of the more northern ones. Sambhur salt pays close upon Re. 1 per maund, to one State or another, before it reaches Jhansie; while sugar from this latter, consigned to Kotah, Patun, Seepree, &c., pays 12½ annas, and to Indore, &c., Rs. 1-1-2, before it reaches its destination; all this over and above our British duties.

Prices of salt,

92. Prices, owing to the short supply, have varied very greatly; at Nandgaon, some twenty miles from Jaloun (an *above-Line* mart, whence this latter post commonly draws its imports), salt was selling at Rs. 4 per maund in May and June, at Rs. 6 in January and February, and was absolutely unprocurable before the year closed, so that several traders had actually left for Agra, whence they intended bringing down Bhurtpore salt by boat. For the division as a *whole*, it would seem that the average price at marts a short distance above and below Line, was, when the year commenced, Rs. 2-8-4, and Rs. 6-1-11, per maund, respectively. Prices gradually rose (and are still rising), and when the year closed stood at Rs. 3-13-0 and Rs. 7-2-9; but in many places it has sold as high as Rs. 8-8-0 per maund retail.

Sugar,

93. The price of sugar seems to have varied but little. The refined sugar of the quality chiefly exported from this division seems to have averaged at Jounpore, Azimgurh, &c., Rs. 9-8-2, and at Jhansie, above Line, after paying duty, Rs. 12-6-1. The same sugar is said to have sold at Rs. 16 at Indore.

and unrefined sugar.

94. The unrefined sugar at Calpee, Mow, &c., averaged Rs. 5-5-5, and at Jhansie, above Line, after paying duty, Rs. 6-7-8 per maund.

THE SAUGOR DIVISION.

[*Length*, 139½ *miles*; *Number of Guard-posts*, 163. *Superior Officers*, 11; *Petty Officers*, 191; *Privates*, 912; *Total Establishment*, 1,114. *Annual average for the three years ending the* 31*st March*, 1869: *Exports—Sugar*, 35,201 *maunds*; *Imports—Salt*, 2,30,366 *maunds*.]

SAUGOR.

GROSS REALIZATIONS.

95. In Saugor there was a decrease (27) of over 2¾ lakhs of rupees, or 34 per cent., in the realizations of 1868-69, as compared with those of 1867-68.

SALT.
Decrease entirely in salt.

96. The decrease was entirely in salt, in which the falling-off amounted to 38·6 per cent.; and in sugar and miscellaneous receipts there was a small increase. The salt that is actually (28) imported (the nominal (29) imports of course are different) in this

(27) *Gross Realizations of the Saugor Division.*

Year.	Salt.	Sugar.	Miscellaneous.	Total.
	Rs.	Rs.	Rs.	Rs.
1868-69, ...	4,73,531	42,322	25,935	5,41,788
1867-68, ...	7,71,722	42,201	7,110	8,21,033
Corresponding twelve months, 1866-67, ...	9,26,910	43,776	2,398	9,73,084
Ditto ditto 1865-66, ...	8,67,515	48,593	2,682	9,18,790

(28) ACTUAL IMPORTS.—*Detail of Salt of all Descriptions that actually Crossed the Saugor Line.*

Year.	Sambhur.	Kansia.	Total.
	Mds.	Mds.	Mds.
1868-69, ...	18,366	1,41,686	1,60,052
1867-68, ...	13,248	2,27,094	2,40,343
Corresponding 12 months, 1866-67, ...	39,505	2,54,438	2,93,943
Ditto ditto 1865-66, ...	34,684	2,47,614	2,82,298

(29) NOMINAL IMPORTS.—*Description of Salt of all Descriptions on which Duty was paid in the Saugor Customs'-house.*

Year.	Sambhur.	Kansia.	Miscellaneous.	Total.
	Mds.	Mds.	Mds.	Mds.
1868-69, ...	33,732	1,24,110	...	1,57,842
1867-68, ...	38,567	2,18,673	...	2,57,240
Corresponding 12 months, 1866-67, ...	55,259	2,53,711	...	3,08,970
Ditto ditto 1865-66, ...	51,251	2,36,384	1,537	2,89,172

SAUGOR.

division, is Kansia—Bunjara-carried from Puchbuddra—a little Sambhur, usually less than one-twelfth of the gross imports, and a very little Dobra from Ajmere, known as Chota Kansia, also find their way to this division; but *the* staple of the Saugor trade is Kansia. Here, as in Jhansie (and in a less degree elsewhere), the drought in Rajpootana most seriously impeded Bunjara traffic, almost absolutely preventing the second annual trip. Scarcity in our own Provinces, doubtless, in some degree here also, checked consumption; while, owing to the failure of the supplies of Bunjara-carried salt and its consequent excessive rise in price, rail-borne Eastern and Western salts from Jubbulpore, and Kokan from Khundwa and Nagpore, found their way, to an extent unknown in any previous year, to almost every mart in rear of the Saugor Division, and even in some cases to towns within our narrow Customs' jurisdiction. Hutta, Dumoh, Punchumnuggur, Gara Kota, Mandlah, Seoni, Chuparah, Chundwara, Nursingpore, Punah, Nagode, and Bhugail Khand, or Rewah—all heretofore supplied almost exclusively with Kansia from Saugor—this year received Balumbha, Salumbha, Sambhur, and even "Poorbee Saindha," or Calcutta-imported Muscat rock-salt, from Jubbulpore; and the more southerly of them Kokan from Nagpore.

Descriptions of salt which cross the Line in this division.

Bunjara traffic impeded by the drought.

Increase of rail-borne trade.

Marts heretofore supplied with Kansia obtained salt from other sources.

97. Under these circumstances, the serious deficit in the imports across the Saugor Line can excite no surprise, the more so that it has been in a great measure counterbalanced by improved realizations in Muttra and Nagpore. At the same time, it should be noticed that the excessive depression in the Saugor trade was not entirely natural; when the traders of this mart knew for certain that no more salt would arrive, they combined to raise prices, thinking from the analogy of the past that they had everything in their own hands. This gave Jubbulpore the required opening, and its dealers pushed the advantage so energetically, that before the old-fashioned Saugor traders had even began to think of reducing prices, the mass of their old customers had been supplied from Jubbulpore.

Deficit in imports not a matter of surprise.

Depression in trade not entirely natural, but partly due to a rise in prices.

98. In sugar, although on the whole *revenue* there has been a trifling increase (less than one-third per cent.), there has been a decrease in the actual exports (30)—which differ widely from the nominal ones (31)—of about five per cent. in the refined article, coupled with an increase of nearly 58 per cent. in the raw article. Practically, much more refined sugar is actually here exported than unrefined; moreover, this actual difference is exaggerated in our figures, because, since *unrefined* sugar only pays duty along about two-thirds of this division, we have no record of the export of nearly one-half of what actually crosses the Line; hence a decrease of 1,400 maunds in refined sugar is only a loss of 5 per cent., while an increase of only 2,300 maunds in raw sugar is a gain of no less than 58 per cent. In neither case is the difference (when we look at the actual quantities concerned) of much importance; but

SUGAR.
Fluctuations explained.

(30)—ACTUAL EXPORTS.—*Detail of Sugar, Refined and Unrefined, which Crossed the Saugor Customs' Line.*

Year.	Refined.	Unrefined.	Total.
	Mds.	Mds.	Mds.
1868-69, ...	26,029	6,328	32,357
1867-68, ...	27,425	4,012	31,437
Corresponding 12 months of 1866-67,...	28,446	5,038	33,483
Ditto ditto, 1865-66,...	48,709	9,055	57,764

(31)—NOMINAL EXPORTS.—*Detail of Sugar, Refined and Unrefined, which paid Duty at the Saugor Customs'-house.*

Year.	Refined.	Unrefined.	Total.
	Mds.	Mds.	Mds.
1868-69, ...	38,166	11,082	49,248
1867-68, ...	37,142	13,490	50,632
Corresponding 12 months of 1866-67,...	37,947	15,571	53,508
Ditto ditto, 1865-66,...	43,795	12,795	56,590

it would seem that the real cause of some 900 maunds more of sugar crossing this portion of the Line in this year of famine was, that this latter did not materially affect those portions of Rajpootana, Bhopal, &c., which Saugor chiefly supplies; while the crops in our own territories hereabouts, *above* Line, were, I understand, superb, and the people peculiarly prosperous.

COURSE OF TRADE.
Convenience of bonded warehouse to traders.

99. Of the salt that crosses in this division, rather more than nine-elevenths comes to Saugor itself, where our bonded warehouse affords many facilities to traders, and whence numerous roads, convenient for the distribution of the salt inland, diverge.

Salt.
Supplies whence drawn and where taken to.

100. Much of the salt that is imported in this division comes direct from the sources, but Khoray, Khimlasa, Rahutgurh, and various marts in Bhopal, are also depôts whence the traders draw supplies. Once across the Line, the salt finds its way to Dumoh and to numerous marts in the Saugor and Jubbulpore Districts, in Rewah, Bijnour, Nursingpore, &c. *From* the Line the Bunjaras' cattle often return unladen; but also often take sugar, grain, dyes, and the like, as return freight, *to* the Line; the carriage that takes salt towards Jubbulpore, &c., returns laden with rice, grain of all kinds, ghee, cotton, sugar, iron, lac, cloth, and dyes.

Sugar.

Cost of Carriage.

101. The cost of carriage to the Line is estimated by the Bunjaras at Rs. 1-6-0 per maund from Puchbuddra (or about six-fifteenths of a pie per mile), at Rs. 0-15-0 from the Sambhur lake (about nine-twenty-fifths of a pie per mile), and from Ramsur,* in Ajmere, at Rs. 1-4-0 (or three-fifths of a pie per mile) per maund; but, as the cattle are their own, and they only carry their *own* goods, little reliance can be placed on these figures.

Salt.
Means of transport.

102. The whole of the salt *comes* to the Line (or depôts immediately above it) on bullocks or buffaloes; from the Line it travels both on carts and bullocks, though principally on the latter; and *from* the Line the cost of carriage averages about seven-eighths of a pie per maund per mile for all considerable distances; while for short distances, and over particularly difficult tracks, it rises in some cases to fully two pies.

103. Mirzapore supplies almost all the sugar exported from the Saugor Division. The major portion comes direct thence, but a certain amount, though derived originally from Mirzapore, is purchased by the Saugor traders at Jubbulpore and other intermediate marts.

Sugar.
Whence received and where exported to.

104. The sugar here exported goes chiefly to Bhopal, but a considerable amount is consumed in our own territories above Line (the Line at present running here rather wide of our frontier), and some finds its way to Indore and other marts in South-eastern Rajpootana.

Discouraging prospect of the salt trade.

105. There seems little hope that the salt revenue of this division will ever regain the position it has held in past years. Kansia salt can scarcely reach our Line at a lower average rate than Rs. 3-4-0 per maund, or sell retail in marts below Line for less than Rs. 6-8-0. Kokan salt, the prejudice against which disappears (as we have now full proof) within a year wherever it can be introduced at cheap rates, will, as soon as the G. I. P. Line is open to Nursingpore, sell retail at from Rs. 4-12-0 to Rs. 5 per maund at Saugor itself, and cheaper lower down the Line.

Bunjara trade in British territory becoming impossible.

106. Bunjara trade, too, into our territories, is getting impossible. In Native States, the Naick, though he has to pay duty to the Rajah, receives a khillut in return, and though he pays petty fees to landowners, has his property protected, and free pasturage allowed him. The moment he enters British territory, some greedy grantee is down upon him. His herds may not have, and probably *have* not, done four annas damage; but pounds, and Civil and Criminal Courts are put in action against him, and money (often more than a journey of 500 miles through Rajpootana, with all its concomitant transit dues and tolls, has cost him) is extorted from him, under their

* In Appendix C. will be found a note on the manufacture of Dobra salt, by Captain Repton.

pressure. No one is to blame for this; it is simply that our more highly civilized system is incompatible with the rough freedom from restraint which is essential to the Bunjaras'* success. His trade in this direction is doomed, and with it the import trade of the Saugor Division. The richer classes will, doubtless, still consume Kansia; but the import of this, the main staple of this division, will probably diminish by at least two-thirds.

PRICES. Salt above

107. Prices during the past year have ruled high in this division. In marts from ten to twenty miles above Line, Kansia was selling in April, 1868, at Rs. 3-4-6 per maund, and thereafter, month by month, steadily rose, until in March, 1869, it had reached Rs. 5-10-6 per maund.

and below Line.

108. Below Line it averaged at Saugor and two other leading marts Rs. 6-11-8 per maund in April, 1868, and in March, 1869, it averaged in the same places Rs. 8-3-8 per maund. In some places it was much higher; in Dumoh it was selling at Rs. 10 per maund in March. Sambhur ruled somewhat lower; it began above Line at Rs. 2-13-6, rose steadily till January when it was quoted at Rs. 4, and again (comparatively large supplies having arrived above Line), declined to Rs. 3-12-0. Below Line, opening at Rs 5-8-8, it gradually rose to Rs. 7-4-6, falling during the last quarter to Rs. 6-15-6 per maund.

Sugar.

109. In sugar, prices varied little during the year. Refined sugar averaged Rs. 13-2-7 in marts within short distances below, and Rs. 15-5-1 per maund in similar marts above, Line; while, for the same places, the average of unrefined sugar below Line was Rs. 4-11-6, and above Line Rs. 6-2-5.

SMUGGLING stimulated by high prices.

Line weakly manned, and barrier defective.

110. Of course the very high prices and great scarcity of salt immediately below Line stimulated smuggling in a division, large portions of whose Line is exceptionally weakly manned, and along only one-fourth of which a really *good* preventive barrier as yet exists. Some progress has been made during the past, and greater still *will* be made during the current, year in strengthening our fence here; but the physical difficulties of the country are such, and the establishment is in parts so weak, that smuggling, in the best of years, will never be effectually checked until the extension of railway communication, by pouring abundant supplies of cheap salt into the whole tract of country in rear of the Line, removes (as in two years we hope it will) the existing strong temptation to evasion of our duties.

Octroi duty on salt still maintained in Saugor.

111. In almost every city in British India the octroi duty on salt has been abolished; but in Saugor, where salt is, I believe, dearer than in almost any other place within our dominions, it is still, it would seem, somewhat unaccountably maintained.

THE HOSHUNGABAD DIVISION.

[*Length*, 286 *miles*; *Number of Guard-posts*, 123. *Superior Officers*, 8; *Petty Officers*, 143; *Privates*, 711; *Total Establishment*, 862. *Annual average for the three years ending* 31*st March*, 1869: *Exports—Sugar*, 9,900 *maunds*; *Imports—Salt*, 58,624 *maunds*.

HOSHUNGABAD.
GROSS REALIZATIONS. Decrease.

112. The gross realizations (32) of the Hoshungabad Division for the past year fell short by nearly Rs. 10,000, or about 8½ per cent., of those for 1867-68. The loss was in salt only; in the sugar duties (in this division levied only on the refined article) there was an increase of about 5 per cent. (*vide* nominal exports, the

(32) *Gross Realizations of the Hoshungabad Division.*

Year.	Salt.	Sugar.	Miscellaneous.	Total.
	Rs.	Rs.	Rs.	Rs.
1868-69, ...	90,000	13,710	2,441	1,06,151
1867-68, ...	97,827	12,981	5,275	1,16,083
Corresponding 12 months of 1866-67, ...	1,31,770	9,044	7,290	1,48,104
Ditto ditto 1865-66, ...	1,06,743	16,410	5,933	1,29,086

* For certain particulars about the Bunjara class, *vide* Appendix B., a note by Mr. Baness, Patrol of Saugor.

Cause explained,

foot-note table 36). The decrease in the salt revenue is attributable—1st, to the drought in Rajpootana, which, to a great extent, prevented the usual Bunjara-carried supplies of Kansia (which pay duty in *this* Collectorate) reaching the Line; and 2nd, to the extension of railway communication, now open to Beerh (20 miles north of Khundwa), and the consequent increased influx of Kokan salt, which pays duty at the Bombay outposts of the Nagpore Division. The decrease is in fact nominal (34). Rs. 63,000 were brought to credit on account of Hoshungabad at Nagpore, and altogether 69,477 maunds of salt *actually* (33) crossed the Line in this division during 1868-69, against only 58,780 maunds in 1867-68, and 50,626 maunds in the corresponding twelve months of 1866-67.

and shown to be merely nominal.

SALT.
Supplies whence drawn.

Actual increase almost wholly due to Kokan.

While the drought and local changes caused the other salt to fluctuate.

113. Hoshungabad draws its supply of salt from four different sources—Sambhur, Puchbuddra, the Runn of Cutch, and Bombay; the latter sending now nearly two-thirds of the whole amount imported. Almost the whole of the *actual* increase in imports, above noticed, was due to Kokan salt, which from here found its way to many marts, heretofore supplied, *viâ* Saugor, with Rajpootana salts. The proportions of the other three kinds imported varied a good deal in the past and previous years, drought having opposed greater obstacles to the transport of Kansia than to that of Sambhur and Buragura, which consequently gained at the expense of the former; but the total of these three salts differed little in these two years, and the marked differences observable in their totals in these and previous years, is merely due to the change of Line that took place in 1866-67, whereby a considerable Rajpootana salt-consuming tract was brought within Line.

SUGAR.
Cause of increase.

114. The increase in sugar is due—*vide* actual exports (35)—to my placing Bombay sugar on the same footing as that produced elsewhere in our territories.

(33) ACTUAL IMPORTS.—*Detail of Salts of all Descriptions that actually Crossed the Hoshungabad Line.*

Year.	Kansia.	Sambhur.	Buragura.	Kokan.	Miscellaneous.	Total.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
1868-69, ...	18,354	2,132	3,786	42,813	2,392	69,478
1867-68, ...	20,809	20	2,731	33,576	1,645	58,781
Corresponding 12 months of 1866-67,	14,652	322	8,131	25,892	1,630	50,626
Ditto ditto, 1865-66,	14,655	1,193	2,070	3,963	1,170	23,052

(34) NOMINAL IMPORTS.—*Detail of all Descriptions of Salt on which Duty was paid at the Hoshungabad Customs'-house.*

Year.	Sambhur.	Kansia.	Kokan.	Baragura.	Kokan and Bhooskie mixed.	Miscellaneous.	Total.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
1868-69, ...	2,343	22,639	2,211	1,466	1,223	1,223	31,105
1867-68, ...	96	22,782	12,009	3,194	1,713	4	39,798
Corresponding 12 months of 1866-67, ...	255	21,508	25,251	15,139	1,961	4	64,118
Ditto ditto 1865-66, ...	1,184	30,946	2,988	2,579	254	414	38,365

(35) ACTUAL EXPORTS.—*Detail of Sugar, Refined and Unrefined, which Crossed the Hoshungabad Customs' Line.*

Year.	Refined.	Total.
	Mds.	Mds.
1868-69, ...	15,048	15,048
1867-68, ...	13,257	13,257
Corresponding 12 months of 1866-67, ...	11,760	11,760
Ditto ditto, 1865-66, ...	19,487	19,487

(36) NOMINAL EXPORTS.—*Detail of Sugar, Refined and Unrefined, on which Duty was paid at the Hoshungabad Customs'-house.*

Year.	Refined.	Unrefined.	Total.
	Mds.	Mds.	Mds.
1868-69, ...	13,710	...	13,710
1867-68, ...	12,981	...	12,981
Corresponding 12 months of 1866-67, ...	9,044	...	9,044
Ditto ditto, 1865-66, ...	16,410	...	16,410

CARRIAGE.
Salt.

115. Kansia salt passes chiefly the northern, Sambhur and Buragura the central, and Kokan the southern, posts of this division. Bareilly, Bhurkutch, Chotur, and Boodnee marts, in Bhopal, supply most of the Kansia and Sambhur; Indore, Mhow, Sundulpore, and Nimar, the rest of the Sambhur and the Buragura; while the Kokan salt is all laden at the Boreebundur, Dadur, and Kullian stations of the G. I. P. Of course, all but the Kokan comes to our Line almost exclusively on bullocks, and from the marts near at hand. The cost of carriage (which includes crossing the Nerbudda) seems very heavy, averaging something like three pies per maund per mile; but from the more distant marts, such as Indore and Mhow, it may be taken at about one pie per maund per mile. From our Line to the various marts below it (Sobhapore, Sohagpore, Babye, Soonee), which derive more or less of their supplies from Hoshungabad, salt travels indifferently on carts and bullocks, the former being apparently the cheaper, and (in a part of the country where good roads are scarce) *less* reliable means of conveyance; so much so that the cost per mile per maund by *cart* is estimated at about two pies, while by bullock it is on an average about three pies.

Kokan, rail-borne only.

Cost of carriage.

116. Both to and from the Line, salt seems to travel commonly as an original investment; the carriage (the railway of course excepted) mostly returning empty, but sometimes taking back sugar, cocoa-nuts, and grain.

Salt travels as an original investment.

Sugar.
Supplies whence drawn,

117. Of the sugar exported from this division, 13,000 maunds came from Mirzapore, and 2,000 from Bombay. The merchants who supply South-east Rajpootana find it cheaper to bring their sugar from Bombay by rail to Khundwa, and then, paying our duty, export it into Bhopal, &c., than to take their goods out short of Boorhanpore, and transport them by country by-roads into Rajpootana, although by adopting this latter plan they would escape the payment of our duty. Of course, sugar intended for Indore and Mhow is taken out at Munmar, and travels up the main metalled road. Mirzapore sugar crosses at all the other posts; Bombay sugar at Khundwa only. As soon as the G. I. P. is completed to Jubbulpore, not only, I believe, will Bombay sugar cease to come up here for export into Rajpootana, but Mirzapore sugar will drive back the Bombay staple some distance down the Line. This Bombay sugar, I should note, is very little of it the produce of the Bombay Presidency. Out of 2,000 maunds that crossed the Line here, 1,278 maunds were from Mauritius; 300 maunds Siam and Singapore sugar; 52 maunds Kasheepooree, or Bengal sea-borne; 11 maunds Chinese sugar-candy, &c.; and so on.

and whence distributed.

Prospects of the Bombay sugar on the completion of the G. I. P.

Sources from whence the sugars which cross in this division are drawn.

118. Not only Kokan, but even the better Noh salts found their way, the latter, *viâ* Hattrass and Jubbulpore, to marts immediately in rear of the Hoshungabad Line; and, *mixed* with Sambhur and Kansia, found, owing to the comparative cheapness of the mixture, a ready sale.

Marts in which Noh and Kokan salt found sale.

119. The transit duties levied by various Native States and Chieftains on Sambhur salt after it has quitted the Jodhpore and Jaipore territories, and before it reaches Hoshungabad, amount to about Re. 1 a maund. It then pays our Rs. 3 duty, and after all this a *town duty*, it is reported, in Hoshungabad itself.

Excessive duties levied on Sambhur salt.

PRICES.
Salt.
Prices varied greatly.

120. The price of salt varied greatly in this division during the past year. Kansia averaged in various marts from ten to twenty miles above Line Rs. 3-5-8 per maund in April, 1868. It then rose slowly to Rs. 3-12-4 in September, jumped to Rs. 4-9-0 in October, and to Rs. 5-7-8 in November; and, after slight intermediate falls, closed in March, 1869, at Rs. 5-9-8. In marts from ten to thirty miles below Line it opened at an average of Rs. 7-3-9, and rose by September to Rs. 8-4-0, and in November to Rs. 9. It still continued to rise, and after attaining in February in some marts the enormous price of Rs. 10-10-0, again fell, the year closing with a quoted average of Rs. 9-2-9. Sambhur and Buragura ruled lower, but still fetched unusual prices, and were subject to great fluctuations. Kokan alone remained steady, averaging throughout the year Rs. 4-6-2 at Boorhanpore, and Rs. 5 at Seonee, at which latter place, Kansia *averaged* Rs. 8-3-1; and at no time fell below Rs. 7-5-0—its price when the year opened.

NAGPORE.

The completion of the G. I. P. will stimulate the trade in Kokan.

121. It is not difficult to predict that here, as in Saugor, Kokan will, on the completion of the G. I. P., entirely monopolize the custom of all but the richest classes; and the imports of Western, Bunjara-carried salts sink within very narrow limits.

The generic name of Kokan includes a variety of salts of different qualities.

122. Under the general denomination of Kokan, salts of very different qualities and appearance come into the market. The white salt now loaded at Dadur, which chiefly comes from the Matoongee works, on the Island of Bombay itself, seems to be that prefered by the hill-people of the Puchmurree and Satpoorah ranges (Gonds, &c.), who call it *pucka;* while that loaded at Boreebunder and Kullian, for the most part the produce of the Oorun and Panwell works, which the hill-people condemn as *kutcha*, is what the people of the plains-country in rear of this division are said chiefly to affect.

Sugar.
Price of refined varied greatly.

123. The price of refined sugar fluctuated a good deal during the year, but it averaged the year through, in marts contiguous to the Line of this division, Rs. 14-8-0 per maund below, and Rs. 16-10-4 (including the Bhopal duty of 13½ annas per maund), above Line.

THE NAGPORE DIVISION.

[*Length*, 452½ *miles; Number of Guard-posts*, 211. *Superior Officers*, 13; *Petty Officers*, 226; *Privates*, 1,045; *Total Establishment*, 1,284. *Annual average for the three years ending* 31*st March*, 1869: *Exports—Sugar*, 16,291 *maunds; Imports—Salt*, 3,58,154 *maunds.*]

NAGPORE.

GROSS REALIZATIONS.

Increase in both exports and imports.

124. The gross realizations (37) of the Nagpore Division for 1868-69 were nearly one and a half lakhs of rupees, or 26·5 per cent. in round numbers, in excess of those of the preceding year. There was an increase in both the salt and sugar duties; in the former to the extent of one and one-third lakhs, or nearly 25 per cent.; in the latter, of some Rs. 16,000, or not far from 150 per cent.

SALT.
Causes to which increase is attributable.

125. The increase (38) in salt is due partly to the gradual and natural extension of the area of consumption of Kokan salt (almost the sole import in this division), consequent on the completion of the rail from Bombay to Nagpore and Khundwa—the duty on the salt sent to which latter post is brought to credit in this division, of which the actual imports are as subnoted (39)—and partly to the unusual stimulus,

(37) *Gross Realizations of the Nagpore Division.*

Year.	Salt.	Sugar.	Miscellaneous.	Total.
	Mds.	Mds.	Mds.	Mds.
1868-69, ...	6,68,637	27,116	3,899	6,99,652
1867-68, ...	5,35,530	10,881	6,228	5,52,639
Corresponding 12 months of 1866-67, ...	4,13,142	12,140	7,856	4,33,138
Ditto ditto 1865-66, ...	4,92,472	17,254	9,482	5,19,208

(38) NOMINAL IMPORTS.—*Detail of Salt of all Descriptions on which Duty was paid at the Nagpore Customs'-house.*

Year.	Kokan.	Bhooshkie.	Miscellanous.	Total.
	Mds.	Mds.	Mds.	Mds.
1868-69, ...	4,43,310	1,223	...	4,44,533
1867-68, ...	3,52,236	2,388	3	3,54,627
Corresponding 12 months of 1866-67, ...	2,56,281	9,572	2	2,65,855
Ditto ditto 1865-66, ...	2,70,817	44,331	9,570	3,24,718

(39) ACTUAL IMPORTS.—*Detail of Salts of all Descriptions that actually Crossed the Nagpore Line.*

Year.	Kokan, or Bombay Salt.	Bunwar, or Salt from the Eastern or Madras Coast.	Bhooshkie, or Berar Salt.	Miscellaneous.	Total.
	Mds.	Mds.	Mds.	Mds.	Mds.
1868-69, ...	3,89,641	3,375	1,224	...	3,97,104
1867-68, ...	3,49,516	...	2,388	3	3,51,906
Corresponding 12 months of 1866-67,... ...	2,56,281	2	9,572	...	2,65,855
Ditto, 1865-66, ...	2,76,324	4,059	23,965	...	3,04,348

which that extension received during the past year from the diminished importations and high prices of Bunjara-carried Western salts in Hoshungabad and Saugor, resulting from the drought in Rajpootana.

Kokan salt.
Extension of area of consumption

126. Kokan, that four or five years ago never passed beyond Bhundara, the southern parts of Mundla, and Baitool, and eastward was met at Chanda by the Bunwar or Madras-coast salt, has during the past year spread far into Chutteesgurh, and taken its place in all the Eastern marts of the Central Provinces.

due to superior quality and cheapness, when compared with Western Bunjara-carried salts.

127. Thus, on the one hand, the slightly superior quality and decidedly smaller cost of Kokan, has, in the natural course of trade, *enabled* this latter to displace Bunwar to the extent of some 40,000 maunds, and on the other, the famine prices of Western Bunjara-carried salts enabled Kokan to displace these latter (superior as they are) to an equal extent; accounting for four-fifths of the decrease in Raipore, the whole decrease in Hoshungabad, and a portion of that in Saugor—Collectorates in which the displaced staples paid duty in past years.

Condition of the money market favourable to the Nagpore salt trade.

128. Further, it should be noticed that the state of the money market was peculiarly favourable during the monsoons to the Nagpore salt trade; and the rains not being so heavy as usual, or sufficient to close traffic, dealers freely took advantage of this. Merchants at Nagpore were during this period able to obtain hoondees on Bombay at 4 and even 5 per cent. discount, and this, added to the 3 per cent. dryage still allowed, ensured a fair profit, even supposing the salt to sell (which of course it did not) at only cost price; so that when other branches of trade were dull, that in salt remained brisk, and salt served as the medium for bringing back much of the value of the cotton previously sent down to Bombay.

SUGAR.
Increase.

129. The increase (40) in sugar is due to the opening of the rail to Jubbulpore; thus enabling Mirzapore sugar to re-occupy ground usurped from it by Bombay sugar on the opening of the Nagpore Line.

CARRIAGE.
Cost.

130. Refined sugar, costing per maund Rs. 11-1-4 at Mirzapore, is carried by railway for Re. 0-8-6 per maund to Jubbulpore, and by cart from this latter place to Nagpore for Re. 0-14-0; so that it actually *costs* Rs. 12-7-10 at Nagpore, where it *sells* retail for Rs. 13-5-4. This same sugar sells at Oomraotee in Eastern Berar, and *in Bombay* itself, for Rs. 15; but it is suggested that its comparatively low price at this latter place, where at present only small quantities find their way, must be due to its being there sold more or less adulterated with inferior sugar. Mauritius sugar, on the other hand, sells for Rs. 14 and 16 per maund at Oomraotee and Nagpore respectively; but, irrespective of their selling-rates, Mirzapore produce is preferred, as being, according to the Natives, *sweeter*, and is used almost exclusively for confectionery.

Mirzapore sugar preferred.

Salt.
Quantity and descriptions of Kokan salt imported.
Posts at which it passes.

131. In round numbers, 4,35,000 maunds of Kokan, 1,000 maunds of Bhooshkie, and 4,000 of Bunwar, crossed the Line in this division during the past year. Virtually the whole of the Kokan crossed the Line at Kowtah, *en route* by rail to Nagpore. Bhooshkie passed in only the two Western, and Bunwar only beyond Chanda in the four Eastern posts. Most of the salt is railway-carried the major part of the distance it has to be transported; but from the railway stations to the various marts the cost of carriage in this division appears exorbitant to a degree, varying, it would seem, from two pies to nearly one anna per maund per mile.

Exorbitant rates of carriage.

(40) ACTUAL EXPORTS.—*Detail of Sugar, Refined and Unrefined, which Crossed the Nagpore Customs' Line.*

Year.	Refined.	Total.
	Mds.	Mds.
1868-69, ...	27,115	27,115
1867-68, ...	10,881	10,881
Corresponding 12 months of 1866-67, ...	12,140	12,140
Ditto ditto 1865-66, ...	17,254	17,254

N. B.—The nominal exports in this division correspond with this table.

Means of transport.

132. Throughout this portion of the Central Provinces, the carts are small and bad, and their rates of hire excessive. Kokan salt comes of course from the Bassein and Bombay works, and is laden at Musjed Bunder and Kullian; Bhooshkie (the manufacture of which is now prohibited) comes from Berar, chiefly on bullocks. The Madras-coast salt is brought by Bunjaras from depôts and marts more or less distant from our Line, amongst which, *Sheopore*, 250* miles south of our Dhaba post; *Bhutpallee*, 360 miles south-east, and *Dhopal-moree*, 9 miles east, of the Chamoorsee post; *Goolgaon*, 10 miles east of Wyragurh; *Nowparrah*, 400 miles south, and *Bunwar*, 380 miles south-east, of Ambagurh, may be mentioned. The Bunjaras being themselves the traders in the salt they bring, the cost of carriage from these marts cannot be correctly ascertained. They almost invariably bring back the salt as a return freight to grain which they take down to the coast; and it seems to be rather on the grain they take, than on the salt they bring, that the Bunjaras' chief profits are made.

Salt generally brought as a return freight.

Posts at which sugar passes.

133. Nearly six-sevenths of the sugar exported from this division crosses the Line at Kowtah, *en route* by rail to the Berars and marts in the Bombay Presidency; nearly the whole of the remainder crosses at Jullalkhera. All this sugar is from Mirzapore, and comes by rail to Jubbulpore, and by carts and metalled road to Nagpore; whence sugar for the North-eastern portion of the Berars proceeds by road, *viâ* Jullalkhera, and that for Central and Western Berar, Boorhanpore, &c., by rail, *viâ* Kowtah.

Anticipated change in the future area of distribution of Kokan and Bunwar salt.

134. There is one matter in connection with the salt trade of this division which deserves notice, and that is, that although Kokan has steadily driven back Bunwar (as all Madras salt is generally termed in the Central Provinces), and will, under existing circumstances, continue steadily to circumscribe the area of distribution of this latter, *directly* the third barrier of the Godavery is turned, the positions of the two salts will change altogether. Muchli Bunder, or Masulipatam salt, will have water carriage the whole way from the works to Chanda, and Madras salt will compete, and as I believe successfully, with Bombay, in many of the Central Provinces marts, now exclusively occupied by the latter.

But a line of rail between Nagpore and Chanda would benefit the trade in Kokan.

135. So far as Chanda is concerned, however, it must be borne in mind that the discovery of extensive coal-fields on the Wurdah have *led* to the construction of a tramway between Nagpore and Chanda being sanctioned; and should these works prove as productive as is anticipated, the tramway would probably, before long, be superseded by a regular line of rail, which would again help to turn the scale in favour of Kokan.

Export of sugar temporarily stimulated by the opening of the G. I. P. to Jubbulpore;

but the completion of the G. I. P. will probably result in the extinction of the sugar revenue in this division.

136. As regards the sugar trade, the opening of the railway to Jubbulpore, and the exemption rail-borne sugar obtains from taxation in transit through Rewah, has stimulated the exports of this division; but these will of course fall off materially when the G. I. P. line is complete to Jubbulpore, and sugar intended for Khundwa, Boorhanpore, Western Berar, and Bombay marts, can go direct by rail the whole way, and escape the double transhipment, and the long cart journey from Jubbulpore to Nagpore. Moreover, when we come to take up the Nagpore Loop Line, the sugar duties now levied in this division will altogether cease. The mass of the sugar that now pays duty at Nagpore is consumed in the Berars, which will then be *within* the Customs' Line. What little sugar intended for Khundwa and marts in the Bombay Presidency now pays duty in Nagpore, will, when the G. I. P. is completed, go down *viâ* Hoshungabad; so that the entire extinction of the sugar revenue of this division may be looked for.

PRICES.
Salt.

137. Kokan (full duty-paid) averaged at the principal marts in the Berars about Rs. 4-7-4 per maund, and in Nagpore and Kamptee about Rs. 4-8-0.

* These distances are only approximately given.

RAIPORE.
Sugar.

138. In these two latter marts, refined sugar of all kinds averaged, the year through, about Rs. 14-4-0 per maund, and in the Berars about Rs. 16.

The price of Kokan salt fluctuated greatly, *owing to the supplies of smuggled salt sent to the Central Provinces and the Berars.*

139. The prices of Kokan salt at the various railway-lading stations in the neighbourhood of Bombay varied greatly during the year. So much of the salt sent up to the Central Provinces and Berars is smuggled salt, that the amount of salt sent respectively from Boreebunder, Dadur, and Kullian varies a good deal, according to the success of the smuggling firms in the neighbourhood of these several lading stations. At Boreebunder, now the chief rendezvous for smugglers, salt *supposed* to have paid the Bombay Rs. 1-8-0 duty, sold during the year, as low as Rs. 1-6-0, while at other times it rose to Rs. 2-2-0; at Kullian, where the smuggling has been a good deal put down, it only varied from Rs. 1-11-0 to Rs. 1-13-6—Rs. 1-12-6 being the ruling price there of good salt.

Kullian the station best fitted to facilitate trade, *so long as no abnormal disturbance exists in the market.*

140. Kullian is unquestionably the station best adapted to legitimate trade, as not only is the railway freight thence one anna per maund less than from Boreebunder, but cartage and all other incidental* expenses are lower. It is only when smuggling is being carried on to an almost unlimited extent at Boreebunder, that the trade of this latter station greatly increases. So long as the market is not thus abnormally disturbed, three-fourths of the trade, if not more, will always adhere to Kullian, the growing importance of which office will necessitate a considerable increase to the establishment.

Market often capricious, owing to salt being sold both by weight and measure.

141. As to the *kind* of salt preferred for despatch from Kullian and Boreebunder, the market is often capricious, chiefly because in some places to which salt goes it is bought and sold by *measure*, and in others by weight; and hence, according to the localities for which the consignment is intended, the bulky and lighter, or heavier and more compact descriptions, are alone accepted.

THE RAIPORE DIVISION.

[*Length, 268 miles; Number of Guard-posts, 71. Superior Officers, 6; Petty Officers, 55; Privates, 359; Total Establishment, 420. Annual average for the three years ending 31st March, 1869: Exports—Sugar, 398 maunds; Imports,—Salt, 1,63,500 maunds.*]

RAIPORE.
GROSS REALIZATIONS.
Decrease.
Cause of decrease

142. In the Raipore Division the realizations (41) from salt fell short by some Rs. 80,000, or nearly 27·5 per cent., of those of the previous year. Of sugar, less than 500 maunds are annually exported in this division, and in this branch of trade no appreciable change has taken place. Of the falling-off in salt, fourth-fifths is due to the influx of Kokan, *viâ* Nagpore; the revenue of the Collectorate of which division gained proportionately.

due to an erroneous impression which prevailed among the Bunjaras,

143. This influx of Kokan has been *chiefly* due to its comparative cheapness, resulting from its carriage by rail, but it is also partly due to an impression which prevailed amongst the Bunjaras, who alone supply salt to the Raipore Division, that the Customs' Line here was about to be abolished. So strongly were they possessed with this idea, that although large quantities of salt were brought from the coast and stored above Line, the Bunjaras who owned it persisted in bringing it sparingly across the Line, thus foolishly, as it were, themselves opening the way to a rival,

(41) *Gross Realizations of the Raipore Division.*

Year.	Salt.	Sugar.	Miscellaneous.	Total.
	Rs.	Rs.	Rs.	Rs.
1868-69, ...	2,02,440	432	6,809	2,09,681
1867-68, ...	2,72,862	454	15,448	2,88,764
Corresponding 12 months, 1866-67, ...	3,16,635	388	9,996	3,27,019
Ditto ditto 1865-66, ...	1,19,943	319	2,838	1,23,100

* It is true that Rannoodah is something like four times as distant from Kullian as Oorun is from Boreebunder; but, owing to the commodious creek that runs from Bassein to Kullian, the ample accommodation at the Kullian bunder, and the favourable *set* of the breeze for traffic between the two places, salt can actually be brought at less cost from Bassein to Kullian than from Oorun to Boreebunder.

and caused them to establish a trade in Kokan in those marts which they formerly supplied with Bunwar.

which their own merchandise will, now that Kokan is firmly established in many marts which they formerly exclusively supplied, find it difficult to displace. It was only towards the close of the past official year that they allowed themselves to be disabused of this idea, and since then they have been endeavouring to regain lost ground, and have thrown considerable quantities across the Line. What measure of success they are likely to attain cannot as yet be predicated; but, as matters now stand, Kokan seems likely to continue to undersell Bunwar (as Madras-coast salt is here generally* termed) throughout a large portion of the country in rear of the Raipore Line.

They are now endeavouring to regain lost ground

with small prospect of success.

Decrease, partly due to increased smuggling,

144. About one-fifth of the decrease is due—1st, to the increase of smuggling across the Line; 2nd, to the increase of smuggling round the eastern terminus of the Line.

owing to the Line being insufficiently manned.

145. The Line is in many parts such a mere skeleton, that, as was last year pointed out, smuggling *must* increase as the Bunjaras become more and more alive to the extreme facility of eluding the vigilance of our officers and men.

Still the establishment have been active in suppressing smuggling;

but, from circumstances beyond their control, their efforts were impaired.

146. These latter have not been idle; they have seized in round numbers 1,730† maunds of salt in the act of being smuggled, against 650 maunds in 1867-68; but, situated as our posts are from three to seven miles apart, probably the amount seized formed but a very small portion of the salt that thus escaped duty. If this Line is to be maintained, it must absolutely be strengthened.‡ As regards the rounding of our terminus, which is now moved to a somewhat better position at Dhama, this, I believe, still continues to increase, and will apparently inevitably do so until means are taken, by prolonging the Line to the seaboard, to shut out the low-dutied Madras salt altogether. I had rather see our high duty reduced to the Madras level, and this Line abolished altogether; but if the difference in the rate of duty is to be maintained, there is, it seems to me, no alternative but to prolong the Line to the Coast.§

SALT.

Bunwar salt, where produced.

147. The great mass of the Bunjara-carried salt here imported (42 and 43) is properly Bunwar, and is brought from the Nowapara works, situated on the coast, towards the south of the Ganjam District, but about one-fortieth is brought from Itchapore, Ganjam, and Umeerbelee; the whole, however, is commonly designated as Bunwar.

* Properly speaking, Bunwar is only the Nowapara salt.

† Orders for the confiscation of 860 maunds of this were not issued until after the close of the year, hence, only 870 maunds are entered in the confiscation statement of the division.

‡ Formal proposals for the re-organization of this portion of the Line (with full detail of establishment and cost), simultaneously with the abolition of the loop Nagpore Line, have been submitted for the consideration of the Chief Commissioner, Central Provinces.

§ This matter has been separately re-called to the notice of the Government of the North-Western Provinces, and demi-official proposals for the required extension, with details of the strength and cost of the necessary establishment, have been submitted to His Honor the Lieutenant-Governor of Bengal.

(42) ACTUAL IMPORTS.—*Detail of Salt of all Descriptions that actually Crossed the Raipore Line.*

Year.	Bunwar Salt, or Salt from the Eastern or Madras coast.	Itchapooree.	Kokan or Bombay Salt.	Ganjam.	Miscellaneous.	Total.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
1868-69, ...	1,29,632	1,780	...	989	57	1,32,408
1867-68, ...	1,99,022	...	...	...	...	1,99,022
Corresponding 12 months, 1866-67	1,94,711	...	...	...	...	1,94,711
Ditto ditto, 1865-66,	1,07,217	...	3,419	...	1	1,10,637

(43) NOMINAL IMPORTS.—*Detail of Salt of all Descriptions on which Duty was paid in the Raipore Customs'-house.*

Year.	Bunwar.	Miscellaneous.	Total.
	Mds.	Mds.	Mds.
1868-69, ...	1,32,184	2,776	1,34,960
1867-68, ...	1,81,908	...	1,81,908
Corresponding 12 months, 1866-67,...	2,11,090	...	2,11,090
Ditto ditto 1865-66,...	71,810	5,786	77,596

RAIPORE.

COURSE OF TRADE.

Salt.

148. Bunwar crosses at *all* the posts of this division; the other kinds cross only in the Sankra and Sohella beats. Bunwar comes, as a rule, direct from the works; the other descriptions are mostly brought from Borasambhur, Patna, Sonepore, and the Russool Koondah marts above Line.

COST OF CARRIAGE.

149. The chief marts below Line to which the salt crossing in this division finds it way, are Droog, Raipore, Belaspore, Ruttunpore, Sheonarayn, Saindra, Chanderpore, Bhookna, and Raighur. Both to the Line, and from this latter to these various marts, the sole means of transport employed are Bunjara bullocks. From Nowapara to the Line, an average distance of 240 miles, salt is conveyed for about Rs. 1-12-0 (or one and two-fifths pie per mile) per maund, according to the Bunjaras' own estimate. From the Line, the cost of carriage is much higher, as a rule, and averages about two and a half pies per maund per mile.

Sugar.
Whence supplied.

150. What little sugar is (44) here exported comes exclusively from Mirzapore, *viâ* Jubbulpore, and is exported through the two western posts of the Line only.

Moderate transit dues levied on Bunjaras.

151. The Bunjaras of this part of the country have this great advantage over their brethren who ply in Western India, that, although they pass through much *quasi*-independent territory, they have but little to pay as transit dues, which, between the works at Nowapara and our Line, only amount to four annas per bullock-load of say two and a half British maunds.

PRICES.
Salt.
Can furnish no information regarding price above Line.

152. I have no information as to what salt has sold for during the year at marts *above* Line.

Price below Line.

Below Line it *averaged* at Raipore about Rs. 6-6-0, at Belaspore about Rs. 7-12-0, and at Sheonarayn about Rs. 8 per maund.

(44) ACTUAL EXPORTS.—*Detail of Sugar, Refined and Unrefined, that Crossed the Raipore Line.*

Year.	Refined.	Unrefined.	Total.
	Mds.	Mds.	Mds.
1868-69, ...	431	...	431
1867-68, ...	454	...	454
Corresponding 12 months of 1866-67, ...	388	...	388
Ditto ditto, 1865-66, ...	319	...	319
N.B.—The nominal imports correspond with this table.			

APPENDIX A.

Reports of Officers regarding the Consumption of Salt by Men and Cattle.

SIRSA.

Mr. Parsons, Collector:—"The people nowhere complained of not being able to get sufficient salt for the actual necessaries of life. In some places below the Line, they certainly admitted that if it was cheaper they would use more of it, that is waste it, I suppose, but that their real requirements per adult head were not over 5 seers, and for a child from half to less than this, and this they could always procure.

"The population above Line certainly use salt more freely, because it is cheaper, and if there is any difference in the physical appearance of the people residing above and below Line, it is in favour of the latter.

"With regard to cattle. The people both above and below Line do not systematically give their cattle salt, and their reasons for not doing so are, 1st, that this is a pasture country, and the people keep such large herds and flocks that they could not afford to do so, even if salt were very much cheaper than it is now; and 2nd, that most of the water of this district is brackish, and the cattle by drinking of it, do not require salt, and even if they should do so, there are plently of patches of saline earth about their villages, where they could, and do, satisfy their craving for it.

"The exceptional cases where they do give it are when an animal is sick, or when field labour has been unusually heavy.

"Those that keep camels usually give them salt twice a year, generally about the beginning and ending of the rains. They also take advantage of being in the Bikaneer State, at any time, to give them an extra dose or so.

"With regard to the health, strength, and appearance of the cattle above and below Line, I cannot say much this year, as, on account of the drought, three-fourths of them are dead, and the remainder are nothing but skin and bone."

FAZILKA.

Mr. E. C. Tuther, Assistant Patrol:—"The Lahoree salt is the only staple used in these parts, and it is so plentiful that even the poorest class can either afford to buy, or beg sufficient to satisfy their wants, and from frequent enquiries, I learn that each man and woman consumes about 2 tolas a day, or 1 tola to each meal, which amounts to 9·2 seers in the year; and for a child's use it might be safely said to be one-half, one-third, or one-quarter (according to the age) of this quantity. With reference to the supply given to cattle, only those that work hard get about 2 chittacks every second day, except when fodder is given; the quantity is then doubled to help digestion.

"It has come to my knowledge that salt is sometimes given to cattle in the Bhawulpoor territory, when and what for I cannot tell, and I did not think it worth while to go and make enquiries, and compare them with the cattle hereabouts, as a great number in both places were dying off daily from starvation, and so long as this was the case, I knew salt would make no material difference in their condition; but should there be a good grazing season this year, I shall make the necessary enquiries, and hope to be able to report more fully on the subject next year."

URNEEWALA.

Nizam-ood-deen Khan, Patrol:—"From the census reports of last year the number of the population was—males, 3,483; females, 2,406; and children, 4,628; total, 15,017. The daily consumption of salt being per male, 1½ tolas; female, 1 tola; and child, half a tola.

"From the above it will be seen that the total consumption for the year amounted to 1,134 maunds 14 seers 1 chittack.

"The people in these parts keep large numbers of cattle, and cannot afford to give them salt, but the cattle eat the saline plants which grow in these parts. Besides this, in the hot season the water is brackish, and they also lick the saline soil. Only to cattle used for the plough is salt given when they are sick, and then they are taken to the places where salt is cheap, and when that is impracticable, they give the Lahoree salt; but the cattle on both sides of the Line appear the same, though they are weak and only fit for working in sandy soil."

MULOUT. *Ghulam Fukhr-ood-deen Khan, Assistant Patrol:*—"In the villages above Line there are 820 males, 930 females, and 1,122 children. The consumption is as follows: adult males 1½, females 1, and children one-half tola per diem. At this rate the total consumption above Line per year is 310 maunds 10 seers. On the Line the population is 880 males, 999 females, and 1,157 children. The consumption per head per diem is, males adult 1¼, females adult three-quarters, and children one-quarter tola; and the total consumption per year is 254 maunds 37 seers 3 chittacks.

"Below Line the population is 1,067 males, 1,045 females, and 1,188 children, and the consumption per head is as follows: males 10, females 6, and children 3 mashas; total for the year, 195 maunds 10 seers 14 chittacks.

"From the above, it is apparent that the consumption below Line is 189 maunds 30 seers less than the quantity above, and the people above, in comparison to those below Line, remain more healthy. The inhabitants keep large herds of cattle, and give a small quantity of Lahoree salt during the rains, to those employed in field work."

LUMBEE. *Mr. C. G. Ingram, Assistant Patrol:*—"The average amount of salt consumed by adults during the year is 5 seers, and by children 3 seers. The villagers admit, that the above amount is quite sufficient, and that salt can be obtained in abundance, and they never complain of the scarcity of salt. The villagers give salt to their draught cattle very seldomly, and when they do give it, they give about a chittack at a time. Salt is never given to herds of cattle, as the Natives consider it quite useless. They say that while their cattle are out grazing, that they generally come across saline patches of earth, where they can always satisfy any craving they may have for salt. I myself have observed those saline patches of earth, especially in the vicinity of the tanks where the cattle come to drink, thus rendering the water brackish, and supplying any want of salt the cattle may require. I don't think I would be far wrong in stating that there is not a single well, or tank in this beat in which the water is not in some degree more or less brackish. Natives who keep camels inform me that during the month of July every year, they always give their camels about half a seer of salt daily, and those Natives who reside below Line, and have got a number of camels, finding Lahoree salt too dear to give to their camels, in the month of July drive their camels above Line, outside Customs' jurisdiction, where Kharee salt is obtainable at 30 seers for the rupee, and give salt to their camels there."

DUBWALEE. *Mr. A. T. Whitten, Officiating Patrol:*—"From enquiries made both above and below Line, I find that the average consumption of salt per head is 9lbs. a year for adults, and 6lbs. a year for children. This, the people both above and below Line consider quite enough, and they say they could get as much as they liked more. This will easily be seen is the case, when it is taken into consideration that Lahoree salt sells at 12 seers below, and 10 seers above Line, and for the poorer people above Line, 30 seers of Kharee can be got for one rupee. This is much cheaper than I have known salt in any other part of the Customs' Line. It is only those people who keep cattle for ploughing or drawing carts, who give their bullocks salt, and then they give about 1 chittack to each bullock a day, and twice that amount in the rains. Those who have camels, give them about 4 chittacks each, during the rains, but none in the dry weather. I have been informed that below Line, where nothing is to be got

but Lahoree salt at 12 seers per rupee, that those villagers who have a number of camels drive them above Line to Bikaneer, where Kharee salt can be had at over 30 seers per rupee, and feed their camels on salt there, and drive them back when they have had enough."

ODHAN.

Mr. C. W. Sheil, Asst. Patrol:—"I have collected some reliable information regarding the consumption of salt, from persons who have regularly purchased seized salt from our godowns, and who assure me, that 8lbs. or 4 seers Phulloudee, and 10lbs. or 5 seers Kharee is the maximum; but the quantity they purchase, just gives 7lbs. or 3½ seers per man per annum. This appears small, but when the brackishness of the water, which must partly allay the craving, is taken into consideration, the consumption is a fair and healthy one. From collateral investigations made in the interior of Kumaon, where the consumption is comparatively greater, as boys and girls, nay, men and women, tending cattle, carry a small bag of pounded chillies and salt, to use with the green pomegranates, walnuts, limes, and other acid fruit, with which the wilds abound, and which serves as a repast, besides consuming the usual quantity at home, never exceeded 12lbs. The quantity consumed by the Peons in this beat is 7½ and 8lbs. per man. The only time that cattle are its recipients, is when sick, or under heavy tillage, but the dose is so nominal, and the cattle so emaciated, that its salutary effects are not perceptible. The general belief under which salt is administered to cattle by the Kumaonees, which seems to harmonize with the practice prevalent in some parts of the plains, is now, and I hope not uselessly, given, *viz.*: 1st, to aid digestion, when the grass is green and succulent; 2nd, to increase and give a richness to milk; 3rd, to enable them to endure the rigours of winter. I have myself given a chittack bi-monthly during the rains and winter months, to a vast number of cattle under me, whilst a Government tea planter in the Keytour and Dehra Dhoon valleys, and these have always appeared stronger and healthier than the now recipients. In these parts, camels also receive salt, once or twice a year, just before and after the rains, as a digestive."

SAHOOWALA.

Mr. W. H. Bowles, Patrol:—"As far as I have been able to ascertain, the quantity consumed by each male and female adult annually is about 4 seers of the Phulloudee and Kharee, and 4½ seers of Lahoree, or rock salt, as the latter is less acrid and saline. The greatest consumption of salt takes place during the rainy and cold season, when the people have green vegetables to eat, but during the hot season, when the water in the tanks dries up and they have to use well water, which in most places is more or less brackish, they seldom or ever use salt. The cattle both above and below the Line, excepting the bullocks used for the plough, get no salt, and even these only get a small quantity during the rainy season, or when they are sick; but the cattle in these parts all keep in good condition, both above and below the Line. To camels, also, salt mixed with mustard seed is given during the rains, and then only about a seer is given to each. This is done by those who only possess one or two animals; those who possess numbers, seldom if ever give them salt, excepting when they have occasion to go above Line, or into foreign territory, where salt is plentiful and cheap."

DURBEE.

Sub-Assistant Patrol in Charge:—"Although every enquiry has been made, I could not find out the quantity of salt consumed by the people in these parts, and many people say that they never eat salt, but this is improbable, though they may not have done so this year in consequence of the famine."

JODHKA.

Mr. H. S. Neil, Officiating Patrol:—"I find on enquiry, that only the well-to-do persons in villages consume salt at an average from 3 to 4 chittacks in the month. As for children, no certain allowance is given; they generally partake of food with their parents, consequently their consumption could not properly be ascertained; but at an average, I should say that a child of 10 or 12 years of age could not consume more than

one chittack in the month, which I believe to be quite sufficient. The population both above and below Line keep in very good health. The cattle both above and below Line never, as a rule, get any salt; only in cases of sickness about one chittack is given. When there is plenty of fodder, the cattle keep in good condition, otherwise, they are very poor."

BHUTTOO. *Mr. H. S. Neil, Assistant Patrol:*—"With reference to consumption of salt per head of the population in the neighbourhood, both above and below Line, I find on enquiry that adults, male and female, consume at an average 4 chittacks per month, and children half this quantity, which I consider quite sufficient, since the people never complain of shortness in the quantity, and the generality of the villagers keep in very good health. The zemindars do not as a rule give any salt to cattle, except in cases of extreme sickness; they then allow about one chittack of salt once in a way; but there are saline plots of ground above and below Line, where cattle generally go, after they have been feeding on green grass in the monsoons, and lick the earth to satisfy their craving. Although the cattle get no salt, yet they keep in very good condition when there is plenty of fodder for them."

HANSIE. *Mr. W. T. Blewitt, Collector:*—"Regarding the quantity of salt consumed in a month by each adult, those above Line varied a good deal in their statements. No two gave the same quantity. The smallest quantity named was 4 chittacks, the largest 1 seer, and altogether some 60 men were questioned. Taking the average from all the quantities given, I would put down the consumption at 5 seers a year for each adult above Line. The cattle seen in these localities during the early part of the year were in tolerable condition, but in no respect better than those met below Line, and the zemindars everywhere affirmed that salt was never given to them, unless they fell into bad health, or when they had to be fattened up for sale at the fairs held periodically at Hissar and elsewhere. When given on these occasions, it was simply to promote an appetite for the fattening food given, not that the salt itself had the effect of improving their condition.

"The consumption of salt by each person below Line, as ascertained by a similar process of enquiries as that prosecuted in the upper side, is also about 5 seers. The average, certainly, taken from the quantities named by all who were questioned, is somewhat higher than the figure first given, but I consider that 5 seers is about the maximum quantity that might safely be allowed for each person. Even the well-to-do buneeahs do not name more than 3 or 4 seers, and I questioned a good number of them at Bhewanee and at this place."

LADWEE. *Mr. E. F. Davis, Assistant Patrol:*—"I have ascertained that the poor Hindoos, who take meals once a day of unleavened bread, lentils, and butter, eat 4½ seers of salt yearly per head; and Mahomedans, who take meals once a day of unleavened bread, lentils, meat, butter, and butter-milk, 5 seers; and as regards juveniles, from 2 to 3½ seers. Persons in good circumstances, who indulge themselves to meals twice a day, a seer or so more, exclusive of other condiments. The populace confess freely that the quantities above mentioned are fully adequate to their own personal wants, and that they contend with no difficulties in procuring the same. I must venture to record, that although the populace above Line can procure their yearly allowance free of duty in small quantities, from the close proximity of the mart of Balsomund, and consume a little more per head, whereas those below Line have to pay dear for their supplies, notwithstanding there is no noticeable difference between the health and constitution of the two populations.

The people who have animals above Line, owing to their procuring small quantities, free of duty, give salt in autumn and the rains—from 2 to 3 seers a head, yearly—and those below Line, only when an animal falls sick, half a seer. As the shrubs called

'Khire' and 'Sateya,' also 'Sauna,' &c., have a sufficient quantity of alkalies, *i. e.*, carbonate of potash and sulphate of soda, the animals eat and digest their fodder; but there is a vast difference in the strength and appearance, as the cattle below Line are weak and lean."

Hissar.

Mr. W. E. Ives, Patrol:—"I may mention from what I have learnt, that in the town of Hissar, below Line, which comprises a population of 14,137 souls, the monthly consumption of salt per head is 5 chittacks, and for a child 3 chittacks; and above Line I should say the same. There appears to be no difference as far as I can see in the health of the two populations. In this part of the country it appears the cattle do not get salt, because they graze on a plant which grows here, called 'Khair,' and 'Jhal,' by eating which they say salt is not necessary. However, I hope in future to be in a position to give more reliable information on this head, as this is a question which requires lasting and searching enquiries."

Hansie.

Mr. G. P. Conroy, Officiating Patrol:—"Neither above or below Line have the inhabitants of this part of the country made it an established rule to give salt to their cattle, unless to increase their appetite, and revive them after a long journey, or in cases of sickness, when about a chittack per head is given; whilst Bunjaras who visit these parts, usually do make it a practice to allow a small quantity of salt daily to each head of cattle, to strengthen and fatten them; therefore, if it be administered with this view, it must have the desired effect."

Moondahul.

Mr. J. C. M. Palmer, Patrol:—"Bearing upon the important question of the amount of salt consumed per head by the population, infant and adult, of over 30,000 inhabitants, inside and outside the Line within my own jurisdiction, after repeated and minute enquiries, as well as those of my subordinates, I find that the general average per head does not exceed at highest 9lbs. below Line, and 12lbs. above Line. None have yet complained about the scarcity of salt. With regard to the general health of the people, both above and below Line, from personal observation, it is impossible to say which have the better health. The existing consumption of salt by cattle is that, as a matter of fact, it has never been customary to give them salt, whether cheap or dear, at any time of the year. It is only when they are indisposed, or refuse their fodder, that it is given in small quantities of about a chittack; so that its use could never be sufficient to effect in any direct way the general consumption of the population within the jurisdiction of my beat. As regards the difference in the health, strength, and appearance of the cattle, nothing can be properly judged this season, as, owing to the drought both above and below Line, they have suffered equally."

Delhi.—Awul.

Mr. U. N. Kalonas, Assistant Patrol:—"The following information has been acquired after careful enquiries. The consumption of salt per head, above and below Line, is—male adult, 4 seers 8 chittacks; female adult, 3 seers 4 chittacks; and child, 2 seers. The people do not consider the above quantities sufficient, and complain of shortness of supply, but it does not affect their health in any way. Salt is never given to cattle in this neighbourhood; the reason assigned by the zemindars for not doing so is, that it has never been customary. The health of the cattle is not impaired by not getting salt."

Beree.

Mr. J. G. Clarkson, Patrol:—"Each adult male consumes 1 tola of salt per diem, being 6 chittacks monthly, and 4½ seers annually; female adult, 9 mashas daily, 4½ chittacks monthly, and 3 seers 6 chittacks yearly; and a child 4½ mashas daily, 2¼ chittacks monthly, or 1 seer 11 chittacks yearly; but they do not consider the above quantities ample for their wants. There is no difference in health or appearance perceptible in the two populations, *i. e.*, above and below Line. No salt is given to cattle above or below Line, except when sick; and the reason assigned is simply this, that it has never been customary among them to give cattle salt; moreover, they cannot afford to do so, being too poor; but this is a mere pretext, as the more wealthy and opulent among them do not administer salt to their cattle. No distinction is apparent in the condition of the cattle above and below Line."

JHUJJUR.

Mr. J. W. Jones, Assistant Patrol :—"I am sorry I have not been able to ascertain much respecting the consumption of salt by the population within Customs' jurisdiction. There is, however, no actual want of the article, nor do I suppose that there is much difference between the amount consumed above or below Line. The allowance of quantities less than one seer in weight being allowed to pass free of question, gives the inhabitants above Line (within jurisdiction) a good chance of getting as much salt as they need for personal use free of duty. Salt is not as a rule given to cattle, nor is it necessary in this neighbourhood, on account of the many saline tracts. Kurbee grass, and, in fact, every kind of fodder, becomes more or less impregnated with salt."

BADLEE.

Mr. W. Synnott, Patrol:—"The result of my enquiries as to the probable rate of consumption of salt shows that in this vicinity the rate of each adult is an average of three-fourths of a tola per diem, or three seers and six chittacks during the year; and apparently the same rate obtains above and below the Line, notwithstanding the difference in price of the article. Enquiries on this subject, moreover, are usually met by the agricultural classes either with a prompt emphatic denial that salt is used as a condiment, or with a stolid look of such utter ignorance, assumed for the occasion, that the enquirer is apt to feel himself baffled. It is, indeed, worthy of notice, that if the zemindars in the immediate vicinity of the Line are to be believed, they subsist entirely without salt, obtaining now and then an infinitesimal quantity, barely exceeding a pinch, from some friend or wayfarer. They do not complain of shortness of supply, but as a rule say simply that they neither eat nor care to eat salt; and those, even, with whom we are on the best of terms, who will readily help us with information of smuggling, or with bramble for the hedge—even these men, of whom we might expect a frank avowal of the fact that they do consume a certain quantity of salt, will be found in many instances to observe extreme caution immediately the subject is started, and pretend to an ignorance or abstinence altogether irreconcilable with their own perfectly healthy condition, or with the general good health of their neighbours.

"Salt everywhere is cheap enough to be within the means of the poorest, and the necessity for its use is freely admitted by the population beyond inner Customs' jurisdiction. A good proof of this is the fact of the consumption of Sambhur salt below our Line, in preference to Sooltanpooree, notwithstanding that the latter is about 65·10 per cent. cheaper.

"As regards salt for cattle, there is no reason to doubt what is so generally asserted, *viz.*, that cattle receive salt only medicinally, when sick or overworked; or in the case of milch-cows, a few days before calving. In the first place, Natives do not believe that salt as a condiment is necessary for cattle; and secondly, if they did, it is very improbable that the whole population in the neighbourhood of the Line could get a sufficiency of salt for the purpose without our knowing it. Allowing 1 chittack a day for each cow, bullock, and buffalo, and assuming that each village has, say, 500 head of cattle, the daily consumption would be 31¼ seers, and for the whole number of villages, say 60, within each beat, the yearly demand would be 16,875 maunds, giving a revenue from this source alone of half a crore for the entire space within Customs' jurisdiction from one end of the Line to the other. That quantity of duty-paid salt, I venture to say, has never been used for the cattle in our immediate neighbourhood; neither has a hundredth-part of it ever been smuggled across; for, moving about as we do during all hours of the day and night, visiting villages both far and near, and often seeing the cattle fed, we would very soon find out if the cattle got salt, and where the salt came from. There are hundreds of men still living in this vicinity who retain a lively remembrance of the 'Nawabee' days, when the Sooltanpoor salt-works belonged to the Nawab of Jhujjur, and then they never gave their cattle any salt, although it could be had here at five maunds for the rupee. They certainly would have made some complaint long ago if our Line had interfered with their supplies; and after personal inspection of nearly fifty thousand head of cattle, I am able to assert that the

condition of the cattle is the same above and below the Line, which, if it proves anything, proves at all events that there is no shortness of supply."

Dhasa.

Mr. J. M. Mitchell, Assistant Patrol:—"I have often tried to come at the real facts with regard to the quantity of salt consumed per head. All the information I could get was from chuprassees and private servants. The villagers invariably say that they don't eat salt, or if they do, it is only when they can get a chance to do so, that is, I suppose, by getting smuggled salt. As for cattle, they say 'they never get it;' 'it is only on the other side of the Jumna that salt is given to cattle.' Of course I refer here to the lower class of Natives. The wealthier class admit that they eat what I find equals what the chuprassees say. Now, to take even what I could gather about salt, one adult eats about 2 tolas a day; this comes to 9 seers 2 chittacks a year. This is what a man is supposed to consume, but one must bear in mind that a certain percentage must be lost in the preparation of it; then custom requires a man to give a certain portion of his daily bread in charity; this is generally the first cake made, which is given to a man of the lowest caste, or to dogs or crows, &c. We might put the portion thus got rid of at 1 seer and the fraction, *i. e.*, 2 chittacks; this will give the consumption at 8 seers per annum per head. We must now take into consideration that a man does not weigh his salt every day, but that he takes just what he thinks is the proper quantity; this of course he can't do to the exact grain, therefore it is certain that there must be a difference on one side or the other. Now, to come to the value of the consumption. Take, for instance, Sambhur salt, and at an unusually high figure of 7 seers per rupee, this will give 2·9 tolas per pie, that is, very nearly 3 tolas per pie, which means nothing more or less than that a man might enjoy what health his salt can give him, by spending 2 pies every three days, or Re. 1-4-3 every year. We have had no chance this year of observing any difference in the condition of cattle above and below Line so as to ascribe it to the effects of salt."

Gurhee-Hursroo.

Kalee Narain Roy, Patrol:—"From enquiries, I find that each adult, male and female, of the neighbouring population, above and below Line, consume salt per head on an average of about three-quarters of a tola per diem, which makes 4½ chittacks per mensem, or 3 seers 6 chittacks per man per annum. This quantity is considered ample, and no one complains about the shortness of the supply. There is no difference in the consumption of salt above and below Line. Salt is never given to the cattle hereabout, except in cases of sickness; then they give salt to them merely as medicine. No difference can be remarked with regard to their health, either above or below Line."

Bhoondsie.

Mr. W. J. Middleton, Assistant Patrol:—"From enquiries I have made, I find that each adult male and female of the neighbouring population, both above and below Line, consume on an average 3 chittacks of salt per month, or about 2·25 seers throughout the year. This amount is considered ample, and even the poorest do not complain of shortness of supply. There does not seem to be any difference in the quantity consumed above and below Line. Salt is never given to cattle in this beat (except by way of medicine to sick animals), and they seem to get on very well without it. I failed to observe any difference in their appearance or strength, although almost daily I see the animals grazing or at work, both above and below Line.

"Children consume on an average 2 chittacks of salt per month, or 1½ seer annually. Those who are fond of eating salt, I am told, never exceed, in this neighbourhood at least, 4 chittacks a month. This would amount to 3 seers a year, and is considered rather an excessive quantity for one person to consume within that period."

Sooltanpoor.

Sub-Assistant Patrol in Charge:—"The consumption of salt per head is 1 tola per diem. No one complains of this quantity being insufficient, and the health of the people above Line is just the same as those below Line. In this beat, cattle do not receive salt unless they are sick.

"In former times no salt was given to the cattle, and there is no difference in strength or shape between the cattle of that time and the present day."

SYLANEE. *Mr. G. S. Collett, Patrol:*—"The villagers adjacent to the Line generally purchase for consumption the salt that is seized at this post, and from enquiries made by myself, I find that the quantity of salt consumed per head is about 2 seers per annum. This is rather a small quantity, which is owing to the water being brackish. Neither above nor below Line is salt generally given to cattle, nor do they seem to require it regularly. A little salt is given to them when they get sick, and occasionally during the rains."

HODUL. *Mr. G. Aviet, Patrol:*—"The next matter which comes under notice is, regarding the consumption of salt by the villagers in the neighbourhood of the Line. I gather from enquiries made, that every male and female adult consumes 3½ seers of salt during the year, while a child is well satisfied with 2 seers. On conversing with several of the villagers about this matter, not one complained of shortness of supply; their wants, they said, were fully met by the quantity of salt warehoused in Hodul. I here furnish a summary of the quantity :—

	M.	srs.	cks.
"Total quantity of salt warehoused during 1868-69 under cover of rowannahs, ...	2,644	20	0
"To which, add the quantity seized and sold to villagers adjacent to the Line, ...	36	33	6
"Total, ...	2,681	13	6

"And now, estimating the population of the villages both above and below Line of the Hodul Beat at 30,000, a consumption of 3 seers 9⅕ chittacks per head is deduced, and proves that the wants of the villagers are fully met. I find also that salt, as a practice, is not given to bullocks. It is only on loss of appetite that a dose varying from 1 to 1½ chittack is administered."

MUTTRA. *Mr. G. M. Jones, Collector:*—"In certain provinces vegetables are largely consumed; in others, flesh and grains. I believe it will be generally admitted that vegetables require more salt to season them than meat, and also more than is usually taken with bread-stuffs. Reflecting thus, the consumption of salt given is merely the result of local investigations. The highest rates appear here to be about 9lbs. per adult, but did we take the average, including children, it would be about 6lbs. per head per annum. Cattle, as a rule, are not regularly supplied, excepting the draught cattle, and their food is more dry than green; to them some salt is necessary. The herds grazing can obtain as much as they want from any efflorescence, and they take in large quantities where they drink. To decide as to their comparative health above and below Line would be merely hypothetical. Apparently no difference exists, either in treatment or condition. I say nothing of the stimulating and purifying properties of the muriate of soda; any agricultural work of any merit will give this. We have merely to judge of what we see. From this test, I conclude that no comparison for or against the cattle on one side or the other of the Line exists. Stall-fed cattle are treated alike on both sides, and the herds have their dose of salt as the owner thinks advisable."

KOSEE. *Mr. J. Durham, Officiating Patrol:*—"The consumption of salt per head of each adult male and female of the population in this neighbourhood averages, according to enquiries which I myself have made, from 4 to 4½ seers, *i. e.*, from 8 to 9lbs. per annum, which gives a daily consumption of from 1 tola to a little less than 1 tolah per head per day. This is the above-Line rate of such of the population as eat both flesh-meat and vegetable; but from enquiries that I have made from bunneeahs and others who don't touch meat, it would appear that the quantity used by them per annum does not exceed 3¼ seers, or about 6½lbs per head. The poor portion of the

population below Line are not, as a rule, able to indulge in the use of this article as freely as their above-Line neighbours; and among the former, I am told its use is somewhat more limited than among the latter; but the little difference that does exist does not appear to be productive of any difference whatever in the health of the two populations.

"The people both above and below Line hereabouts are not in the habit of giving their cattle salt, except as a medicine, or to the hard-working portion of their herds, when the dose is usually about 1 chittack per bullock. Shepherds and goatherds, I am told, give their flocks and herds salt in the above form during the rainy season, in doses of about 1 seer to 100 sheep or goats. There does not appear to be the slightest difference in the health or appearance of the above and below-Line cattle in this neighbourhood."

CHATTA.

Mr. J. C. Purcell, Assistant Patrol:—"There are three descriptions of consumers about this post, *viz.*, Mussulmans, who use meat; Zemindars, *i. e.*, Jâts, Thakoors, and Brahmins, &c., who consume vegetables largely; and the poorer class. As far as I could learn from personal enquiries, I find that each adult Mahomedan consumes about one tola per diem, or about 9lbs. during the year; the 2nd class, about three-quarters of a tola daily, or about 7lbs. per annum; and the poorer class about one-half tola each, or 5lbs. per annum. I would rather myself think this quantity is not quite sufficient, but a little under the mark. None of the adjoining population complain of shortness of supplies. Those villages above Line never consume any duty-paid salt, but smuggle it from the salt sources close at hand, or bring it from beyond jurisdiction in small quantities for their use. Those below Line, about the banks of the Jumna, get some Kharee salt, illicitly manufactured, across the Jumna. I have been on the look out for this, but could not succeed in seizing any.

"Khatteeks living below Line, I am told, very often get Kharee salt that has been thus manufactured beyond the Jumna for curing leather, &c. As far as I have ascertained, there has been no difference in the health of the population above and below Line. It does not seem to be a practice in these parts to give salt to cattle, but they do so medicinally. They acknowledge giving from 2 to 4 chittacks once a month to cart and pack-bullocks. This practice prevails both above and below Line."

CHOWMOHA.

Mr. J. J. Beck, Assistant Patrol:—"I beg to state that during the most part of the year I have personally made strict and most searching enquiries with regard to the consumption of salt per head of the neighbouring population, both above and below Line, within the scope of my beat, and find that the result stands thus: Each adult male and female, above Line, consumes about 1 tola weight of salt, and each child at an average of one-quarter tola per diem. It is also given to draught-cattle in quantities of 1 chittack each, and to sheep and goats about 1 tola each per month. Milch-cows, however, receive 1 chittack each every week, which is given with the sole object of enabling them to eat more than they would in the absence of salt, so as to increase the quantity of milk; but as far as I can glean, the cattle both above and below Line appear to be alike thin and mangy, which I suppose is owing to scarcity of fodder. Below Line the people murmur very much at the scanty supply of salt, and say that they can procure scarcely enough for themselves, owing to its selling at Rs. 3-12-0 and Rs. 4-0-0 per maund immediately after it crosses the Line; and in consequence of which they are compelled to use it very sparingly to their cattle. Indeed, in some villages the people say that they do not give it to their cattle at all, but this, as I afterwards found out, is false, and the consumption of salt below Line is as follows: each adult consumes three-quarters of a tola, and each child at an average of one-quarter of a tola per diem. It is also given to draught-cattle in quantities of three-quarters of a chittack per month, and milch-cows 1 chittack per month; none, however, is given to sheep or goats."

SITOHA.

Mr. H. Blewitt, Patrol:—"The most reliable estimate that in my opinion can be formed, gives to each adult male and female 1 tola per diem, or about 9lbs. in the year; children one-half tola and under daily, or about 4lbs. to each annually. As a rule, salt is not given to horned cattle generally, excepting in the rainy season, when the herbage is likely to have an injurious effect, owing to the change in the use of green from dry food. The quantity given them is from 2 to 4 chittacks per head, once or twice a month. Sick cattle also receive the same quantity, but the frequency in giving it depends altogether on the state of the animal at the time. Draught-cattle are more frequently supplied, the quantity varying from 2 to 4 chittacks. Some get it daily, others weekly or monthly, according to the inclinations or means of the owners; camels are supplied weekly with about 4 chittacks each time, or 12 seers in the year; sheep and goats, during the rains, get each 1 chittack a week, and in other seasons twice a month.

"From my own personal observations, I have every reason to think that there is no difference to be noticed in the health of the population on either side of the Line. The same might safely be said with regard to the health, strength, or general appearance of the cattle."

FURRAH.

Mr. W. W. Beatson, Patrol:—"From careful enquiries, I have ascertained that each adult of either sex consumes 1½ chittacks per week; and children, according to age, some half the above quantity, others, again, a little more or less, as the case may be, according to health. It is not a common practice here to allow salt to cattle; agriculturists especially give less than owners of draught bullocks. I am told that agriculturists never give a daily allowance, but administer a dose at a time whenever required, *i. e.*, when cattle show symptoms of ill-health it is the practice to give 4 chittacks at once, washed down with a little water. At other times they dispense with salt, and give sweet-oil instead, which acts as a purgative. It is not generally from want of salt that cattle are destroyed, or grow sickly, and the same may be said of the population, for salt is within reach of all. The rates of the lowest description of Balumbha salt sold here, place it in the power of the poorest to make use of it. My experience, of course, extends only immediately above and below Line; what may be the distress far below Line I am not in a position to say; certain it is, people seem quite contented so far as salt is concerned. I have heard of no complaints with regard to any scarcity of this article, or any real distress from a want of it."

AGRA.

Mr. W. O. Bell, Collector:—"From what I have been able to glean on the subject, I am led to the conclusion that people residing above Line, who make use of salt that has not paid the Government duty, consume as follows: Adults, 4½ seers per annum; children, 2¾; average 3 seers 6 chittacks.

"Below Line, and close to it, the consumption is somewhat less, *viz.*, adults, 3 seers 12 chittacks; children, half that quantity; average, 2 seers 13 chittacks.

"In the more distant parts of the country, where salt is much dearer, no doubt the consumption is regulated according to the price at which this necessity of life can be had.

"The cattle belonging to the agricultural classes in some localities get a little salt once a month; in other places not a grain is given. When questioned on the point, the people say that they do administer salt to keep their cattle in condition; others assert that it is not the custom to do so, but my opinion is, that all depends on the price of the article; when cheap, a little is occasionally given; when dear, none.

"As regards the condition of cattle above and below Line, I have never observed any difference to exist, nor heard that the mortality on one side of the Line was greater than on the other."

BICHPOORIE.

Mr. J. F. Conroy, Patrol:—"From all I could collect on this subject, I am led to believe that the adult population above Line consume of untaxed salt 6 seers, and

children half that quantity, per annum. Below Line the consumption is less: adults 4 seers, and children half the quantity.

"The population both above and below Line generally complain of the dearness of salt, and its enhanced price rendering them unable to purchase a sufficiency for their wants. I can credit the assertion of those living below Line, but not of any residing any distance above Line, as the population there use untaxed salt, and as much as they require for themselves and cattle; consequently, the population of the tracts below Line, owing to their using duty-paid salt, and the lowest-priced article, which is of a very inferior description—being derived from the 'Koondah' manufactory in the Bhurtpoor States, and adulterated with Kharee 'noon' when it reaches them—do, I believe, stint themselves and cattle to narrow limits. The description of salt just mentioned is, of course, used by the poorer classes of the village community (who are calculated to be the majority); and for cattle, those of better standing, use pure Balumbha, seldom Sambhur salt.

"With regard to cattle, I conclude from the information I have obtained on the subject, that they get from 2 or 3 chittacks above Line, and about 1 chittack each per month below Line. In such cases the cheapest, consequently the most inferior, quality is made use of.

"There is no perceptible difference in the condition of cattle on each side of the Line; but I believe when cattle-diseases occur, the mortality amongst cattle below Line is on an average greater than in kine above Line, owing, it is imagined, from the cattle there not obtaining a sufficiency of salt, which weakens them, and renders them less able to combat the attacks of murrain.

"Amongst the population, I have not observed, nor have I heard, that the dearness of salt has affected the general health of the inhabitants on each side of the Line. Cutaneous complaints are prevalent amongst the poorest classes, which may be attributed as much to their dirty mode of living, as to the scantiness of supply of good edible salt."

MULPOORA.

Mr. J. D. Parsons, Assistant Patrol:—"I think I can say that an adult person, man or woman, eats about 1 tola, and a child about one-half tola of salt per diem. The Natives in the villages about here do not, as a rule, give their cattle any salt at all. It is only when a bullock falls sick, or when a valuable animal is being fattened for sale, that the owner gives it a little salt occasionally, mixed in the 'musalahs' required for the occasion.

"During the past year, the condition of the cattle above and below Line has been equally miserable, owing to the scarcity of the fodder which is necessary for their existence; and thousands of cattle have died through starvation, or been slaughtered, the owners having sold them to butchers not being possessed of the means of keeping them."

KUKOOBAH.

Mr. H. U. Naylor, Patrol:—"The quantity of salt consumed by adults in this neighbourhood is one-half tola in weight daily, and by children one-quarter of a tola, and less. This quantity they consider sufficient. There is no apparent difference in the health of the people above and below Line; they generally seem to be robust. The cattle all about this part of the country have a very meagre look; this is owing to the great scarcity of fodder. The draught cattle get salt (about 2 chittacks) once a week, and the others when sick only."

DHIMSAREE.

Mr. C. H. Angas, Assistant Patrol:—"The residents of above and below Line, as far as I have been able to make out, consume daily an equal quantity of salt per head, *viz.*, about 1 tola for male adults, a little more than one-half tola for female adults, and scarcely one-half tola represents the allowance to children ranging from 8 to 12 years of age. Below Line, salt is never mixed with the fodder given to cattle, unless

they exhibit symptoms of being sick. Formerly, when the duty was only 8 annas per maund, the owners of bullocks, horses, &c., assert that they always gave it to their animals; but they are unable to do so at the present high rate of tax, and consequently their cattle, as a rule, fall very short of their former excellent condition.

"The residents of above Line, too, assure me that they never give their cattle salt, and there is no perceptible difference in their condition to lead me to suppose otherwise."

FUTTEHABAD. *Mr. J. Monro, Patrol:*—"All the enquiries made on this head, show that each adult male or female consumes 1 tola weight of salt, and each child one-half tola weight per day, and there is no difference in the consumption on either side of the Line: less or more would be injurious to health in different ways. Salt is never given to cattle except in cases of sickness, not even above the Line, where it is cheap enough. Of course, where all eat an equal quantity, health cannot be affected by either excess or deficiency. I have never observed any difference in the health or appearance of the population and cattle on either side of the Line; both are always in good case; a beggar is hardly ever seen. I do not myself think that salt is essential to the health of animals; if it was, wild ones would fare hardly. It may be said that wild ones have access to natural sources of supply; but such sources exist only in the ground or in vegetation, and are therefore open to the tame as to the others. The price of salt, even below Line, is not so high as to prevent a free use of it, considering how little each person uses—say 5 seers yearly—the tax on which would amount to 6 annas. Why, the sale of two bundles of grass would pay the amount, and this is the sole tax they have to pay."

GUJOURAH. *Mr. W. Masson, Assistant Patrol:*—"Having made enquiries into the consumption of salt per head of the neighbouring population, I found out that each adult in one year consumes 4 seers 8 chittacks, and each child 2 seers 4 chittacks, both above and below Line; and they consider such supply fully adequate to their own personal wants. Again, neither above nor below Line do they give salt to their cattle."

BAH. *Purbhakur Rao, Patrol:*—"The consumption of salt above and below Line is as follows:—Children 5 years of age consume daily 5 mashas, from 10 to 12 years of age, 9 mashas; adults, 12 mashas. The above quantity is found adequate, and the people appear healthy. Still they complain of the high rate at which they are compelled to pay for the salt. Below Line, very few ever give salt to their cattle on account of its dearness. Above Line it is administered monthly at 8 chittacks per animal; and the cattle are in far better condition than those residing below Line."

JEITPOOR. *Mr. H. A. Tregear, Assistant Patrol:*—"With regard to the difference in the health, &c., of cattle above and below Line, so far as I have noticed there does not seem to be much difference, the cattle on both sides of the Line being in very poor condition this year; but this is attributable chiefly to the scarcity of grass and fodder, for want of rain."

BURHPOORA. *Mr. L. Verrieres, Patrol:*—"The average consumption of salt for male adults, as far as I have been able to ascertain from the villagers above and below Line, and especially from the Line establishment, is from 6 to 6½ seers per head per annum.

"The exact consumption of salt for female adults and children per annum, I have not been able yet to ascertain to my satisfaction; but, from the little information I have been able to glean on the subject, I would say 4 seers for a female adult, and 2 seers for a child. Now, supposing the number of male and female adults to be about equal, and allowing two children at an average for each couple or family, it would

give a consumption of $3\frac{5}{8}$ seers or $7\frac{1}{4}$lbs. per head per annum on the whole population. I would observe, however, that the poorer class consume more salt individually than their more fortunate brethren; for the latter will prepare their food with 'ghee' and eat their bread with sugar or 'goor'; but the former, who, compelled by poverty to do without 'ghee' or sugar, cannot do without some extra salt.

"As to cattle, from the many individuals I have questioned, it seems evident that they give about 1 chittack of salt a week to bullocks that are worked constantly, that they may eat and drink better, and consequently bear their fatigues better. But herd cattle, as well as buffaloes and milch-cows, do not get salt more than once or twice a year as a medicine. The practice seems to be about the same above and below Line. Some of the people below Line object that they cannot afford to give any salt to their cattle. I have not, however, observed any marked difference in the health of their cattle from those of the villagers above Line."

CHUCKERNUGGUR.

Sub-Assistant Patrol in Charge:—"I find that the average consumption per man does not exceed $3\frac{1}{2}$ seers. I have further been informed that the bulk of the cattle above Line receive on an average 2 seers per head per annum, while of those below Line, not more than 2 per cent. get any."

JHANSIE.

Mr. J. McGowan, Collector:—"In my opinion, a fair quantity should be assumed for the tract of country below Line; say an adult male or female 4 seers per annum, a child 2 seers, and $1\frac{1}{2}$ seer for each head of cattle. Assuming these quantities to be necessary, the enquiry should turn upon the means of the people to purchase.

"Taking a man and his wife, and an average of three children, and say two head of cattle, the quantity required in the year would be 17 seers. The average price of salt below Line is generally Rs. 7 per maund, and the head of the family would therefore have to lay out Rs. 2-15-6 per annum, or 3 annas 11 pie monthly on salt. Can the mass of the population afford these 4 annas a month? If they cannot, they will not, of course, have enough of salt. This season was a bad one for instituting any comparison between the cattle above and below Line, as all are equally starved for want of fodder. But in my opinion, from observation during former years, there is no difference in the stamina or appearance of the cattle. Above Line they legitimately get their chittack a month, and more when they are sick, or very hard-worked; and below Line, though not supplied with it regularly, they are driven off to spots where there are saline efflorescence on the earth, and thus get what they require. Close to the Line, the herds are frequently driven across our Line, and remain above for some days, and are there supplied with salt; particularly after having eaten green grass in the commencement of the rainy weather."

JUGGUMUNPOOR.

Mr. H. M. Lennox, Assistant Patrol:—"The consumption of salt per head above Line is, for a man 6 seers per annum, a woman 6 seers, and a child 2 seers. The cattle receive, once or twice a month, about 1 chittack. Below Line, again, a man consumes 3 seers, a woman 3 seers, and a child 1 seer 4 chittacks. The cattle only receive salt from the well-to-do farmers who can afford it; the rest merely give salt in cases of sickness among their cattle.

"There seems to be no difference in the health of the two populations; but the cattle above Line appear to be in much better condition than those below Line, totally owing, I believe, to their getting a regular quantity of salt."

JALOUN.

Mr. H. Francis, Patrol:—"From the best information gathered, I find, above Line, the quantity supposed to be the consumption of a man, 5 seers per year; a woman, 3 seers; a child, from 8 years to the age of 16, to be $2\frac{1}{4}$ seers. The cattle receive salt only when they are sick, or when a disinclination for water is observed. This year, owing to the hard times, the villagers have not been able to tend to the

wants of their cattle, and they are dying in numbers, either from want of pasture or want of salt when sick. I think the former cause is most to be relied on. The working cattle, I believe, get salt twice a month—2 chittacks each time. The sheep and goats, I hear, get what is here called Gurrah Kharah, a scum scraped off the surface where the water is close to the surface of the ground.

"The people below Line, and indeed above Line as well, complain bitterly of the paucity of the salt supply. There seems to be no noticeable difference in the health of the two populations, owing to the dearth. The difference in the state of cattle above or below Line this year would be a useless comparison, there being scarcely any fodder or pasture to keep them alive."

KOONCH. *Mr. H. Tapsell, Patrol:*—"With reference to the information called for in paragraph 30 of the model report, I would beg to state, that after making searching and continuous enquiries on the subject of consumption of salt by human beings and cattle, both above and below Line, I have formed the following conclusions, *viz.*, that each adult male and female consumes, at an average, 8 chittacks monthly, or 6 seers annually; each child has been estimated at half the quantity consumed by an adult. I have not been able to trace any difference in the health of the two populations. All those villages situated below Line complain of the shortness of the supply of salt, but my opinion is, that it is quite adequate for their personal wants.

"The draught bullocks, both above and below Line, receive bi-monthly 2 chittacks per head.

"The remainder of the cattle above Line receive 2 chittacks of Kharee salt monthly. Those below Line cannot afford to give their cattle the same allowance, as the Sambhur is too expensive, and no Kharee crosses the Line. Their cattle have to satisfy themselves by licking saline earth, or occasionally a description called Bhair Kharee is administered; and in cases of sickness, the owners are compelled to give Sambhur salt. The season has been a very bad one, to judge of the condition of the cattle, on account of thes carcity of fodder; but, in my opinion, the cattle below Line are in better condition than those above, but this is in consequence of the difference in pasturage.

"The sheep and goats, both above and below Line, are fed bi-monthly on Bhair Kharee at the rate of 1 chittack between three. This Bhair Kharee, I believe, does them more good than either Sambhur or Kharee."

INGWEE. *Sub-Assistant Patrol in Charge:*—"From enquiries from residents, above and below Line, the following details of consumption have been arrived at. The daily expenditure of an adult is 1 dela, and that of a child 1 chudam. In fact, they eat even less than this, and are very economical in the use of it, frequently not obtaining as much as they require. Owing to the drought this year, they complain more than usual; and, on account of their poverty, are not able to give to the cattle what these require. If, from time to time, they wish to give salt to the cattle, they take them above Line, into neighbouring foreign territory where salt is cheap, and where they give it to them. At present there is no daily allowance fixed, and just now there is great difficulty in procuring fodder. Although residents above Line do not suffer like those below Line from deficiency of salt, but obtain it cheaply, still everyone is not able to give his cattle a proper allowance of salt, but is not put to inconvenience for his personal supply."

ERICH. *Mr. O. H. Brookes, Assistant Patrol:*—"As regards the consumption of salt per head of cattle, from my own investigations at different times, generally when out shooting, and conversing with the village zemindars, putwarees, and cattle dealers, whose replies I have noted in my note-book, I now enter here the average deduced from the whole of the replies. In the same way, I have dealt with the con-

sumption per head of the population. I find that as a rule the people cannot afford to give their cattle salt below Line; those who reside adjacent to the Line drive their cattle through our 'nakas,' give their animals a feed of salt above Line, and then return. This is generally done once a month, and the quantity then given is about 2 chittacks. Those who reside at too great a distance from the Line to allow of their doing this, either administer a small quantity of what is termed 'Bhair Kharee'—a sort of sulphate of soda—or drive the cattle to some spot where the earth is impregnated with saline deposits, and allow them to satisfy their craving for salt by licking the earth.

"*Above Line.*—Here the cattle receive two 'moothas'—that is, a fistfull—weighing about 2 chittacks; this quantity they get twice a month on the average. It is extremely difficult to judge this year as to whether the cattle above Line are finer and in better condition than those below Line, owing to their all being in a semi state of starvation; but my own impression is, that the cattle below Line succumb to starvation much sooner that those above. Whether this is owing to the cattle not getting salt, or *vice versa*, it is difficult to say.

"*People.*—A man below Line consumes on an average one Government pice weight per day, as also does a woman; nine of these pice go to a chittack, hence the annual consumption equals 2 seers 8·5 chittacks. A child—and here much depends on the age, for the human being is a child from his birth until fourteen years of age. I will take a child aged seven years as my standard; here, then, the results of my enquiries show that he consumes on an average daily one pie weight, which weighs the third of a pice; hence his annual consumption would average 13·518 chittacks."

Chirgaon.

Mr. R. W. McMullen, Patrol:—"The consumption of salt per head yearly, *viz.*, for a woman or a man, above Line, is 6 seers, and a child 3 seers 8 chittacks; and per day, a man or woman one-fifth chittack, and child one-sixteenth chittack. The population above Line is not in want of salt, as it is plentiful; there is a great scarcity of it below Line, but mostly amongst the poorer classes, who sadly complain, and would no doubt consume a larger quantity if they could afford to get it. As regards the health of the neighbouring inhabitants, both above and below Line, it is, to the best of my knowledge, good. On enquiry, I find that the owners of cattle above Line give 2½ chittacks weekly per head; and those below Line, 1 chittack, or a little more, once every fortnight or month. The health of the cattle is also good on both sides of the Line. The cattle above Line can get a sufficient quantity of salt, but such is not the case with those below Line, in consequence of it not being procurable."

Burragaon.

Mr. P. Dwyer, Assistant Patrol:—"The consumption of salt per head of the population, above and below Line, is at the rate of 4½ seers in the year. Regarding cattle, those above eat one-fourth of a seer per week, and below Line, one-eighth of a seer per week. This is only given in the working season, and only cattle that are at work get any salt whatever."

Jhansie.

Mr. F. J. Foster, Patrol:—"The consumption of salt per head among the population above and below Line I think may be said to be in the proportion of two-thirds to one-third in regard to adult males and females, and children; and in respect to cattle, three-quarters to one-quarter, *i. e.*, of a certain class above Line; the same class below Line would be unable to afford more than 2 seers per head. This will be more apparent if the price of salt above and below Line be compared. In regard to cattle, I learn that one-quarter of a seer of salt is given to a limited number that bear hard work, such as ploughing, cart, or well work, above Line, four times a week during the whole of the rains and one-quarter of a seer per month in the summer and winter season. Below Line, only one-quarter of a seer a month is allowed during the rains, and little or nothing given unless the cattle are ill, during the dry months. The above information, I think it right to state, has not been entirely obtained by personal enquiries. I have

CONSUMPTION OF SALT.

been obliged to depend on other sources, consequently cannot enter into greater detail."

BUBEENA. *Mr. J. Graham, Patrol:*—" During the past year a very searching enquiry has been made with regard to the quantity of salt consumed both above and below Line in this beat. I am informed by many people, names of whom are too numerous to detail, *i. e.*, above Line, that they use salt but very sparingly, and that their cattle get little or none, owing to their not having the means to procure it. Several respectable zemindars state they never use more than the weight of a pice in any one day, and that salt is given to their cattle sometimes once a week, and at other times, in ten or twelve days, about 2 chittacks at a time, or as much as they can afford, but to only such cattle as are constantly at work. They say it makes them drink much better, and maintains their strength for a longer period, while the cows get about half the quantity. As for young animals, sheep, and goats, they never get any salt. None complain of a scarcity of salt above Line. The information received from the poorer classes is much the same, with the exception that they all deny giving their cattle more than a quarter of a seer in a month, *i. e.*, to working cattle; and that they are not able to afford salt to young cattle, sheep, and goats. On the other hand, the population below Line have quite a different tale; they state that they seldom get more than the weight of a pice every second or third day, and many of them declare they are unable to get any, on account of the high price of food and the low wages they receive for their labour. The amount of salt consumed by the population below Line is undoubtedly much less than above it. This is easily accounted for when one population can have as much for one anna as the other can purchase for upwards of twice that amount, but I have never heard any one complain of having short allowance for their common use, especially amongst the poorer class; any who have complained were of the better class, who are able to procure it, and which I pointed out to the Deputy Commissioner when on his tour in December last, when a number of this class of people complained to him for the privilege to have a quarter of a seer of salt allowed them once a week free of duty, of which they have never been deprived.

" On the other hand, cattle above Line look better than those below Line, and in some places better than they do in others, but this is for want of fodder only; while those below Line look very rough in the coat and poor. I do not think the population below Line look worse than those above it. Again, I have been informed that the cattle below Line do not get salt adequate to their wants, and when they do get it, it is at long intervals, and only working cattle get it, whilst they complain of their cows getting none. This they think very hard, as they say their cattle will not drink freely, and that it prevents them giving milk, and through this cause they do not get a proper quantity of 'ghee,' and which they consider a loss."

TALBEHUT. *Mr. B. C. Dutton, Patrol:*—"This was a very bad season for making enquiries regarding the consumption of salt among the population, as the scarcity and high price of salt rendered it less cheaply acquirable. Still there are thousands of people employed on the relief works here who consume daily duty-paid salt; those people receive wages from half an anna up to 1½ anna per day, and their daily consumption of salt is one dumrie worth, or one-eighth of a pice, which weighs exactly 132 grains, for each adult person. Making the calculation for the year, this will give for one male person 3 seers 3 chittacks of salt. Females receive 1 anna per day (one-third less than the men); their consumption of salt, therefore, according to means, should be proportionately less, and might very properly be put down at 2 seers 1 chittack per head. Similarly, a child receiving half an anna daily, would, under this scale, consume 1 seer and one-half chittack annually. Well-to-do people in the village, who are neither rich nor poor, but have comfortable means, do not consume more than 4 seers 8 chittacks per head. Of course the consumption of salt depends and varies according to the class of people using it, but it is within the reach of all who have the means of living. I have heard, indeed, and I believe it to be a fact, that there are some of the very poorest people whose extreme want induces them not to mix any salt in their food in the ordinary way, but to

have a large lump of salt separately, which they use when eating by sucking, and after a few mouthfuls, another suck, and so on. This lump of salt is called there 'chuckna' or taster, and by means of the sucking process, it is prolonged out to some time. I think I have said sufficient in regard to the consumption of salt below Line among the people. Above Line I have not had any good opportunity of testing, by personally questioning the people, of the quantity consumed there per head. There must be some difference, no doubt, but I cannot think it is much. From all that I can learn, I would say that if a certain class of people used 3 seers below Line, the same class above Line would not need or use more than 4 seers; though salt is there cheap, there is a certain limit beyond which it could not be used. It is true that complaints are made more by the Line, than the below-Line people of the dearness of salt, and that they cannot obtain, or rather afford, sufficient for use; but this will not hold good. It is shown above that labourers earning 1½ anna per day use 3 seers 3 chittacks of salt annually; which, for the means and for the health, is quite sufficient, especially as they usually use it in one dish only, that is their dal or their 'bhajee' (vegetable). If an adult person cannot afford, or grumbles to give, one dumrie for his salt per day, all I can say is that he is not worth his salt. Cattle, sheep, &c., certainly suffer more or less below Line, as their owners could not afford to give them so freely of salt as was necessary or desirable. The difference in the consumption of salt as regards cattle, above and below Line, is, that the former receive during the rains 4 chittacks of salt three or four times a month, and in the dry months, 2 or 4 chittacks once a month. Below Line, working cattle receive in the rains only 4 chittacks once a month, even if they get that, and during the dry months scarcely nothing, except during the 'Hoolie,' and 'Duserah,' when it is always customary with the Natives to worship their cattle, and that only one day is salt allowed at these festivals."

BANSIE.

Mr. K. Bachman, Assistant Patrol:—"The consumption of salt per head varies greatly both above and below Line in different castes and classes, but the following is about the average consumed by the neighbouring population, *viz.:* Above Line—adult male, 6 seers per head; adult female, 4¾ seers per head; average for children, 2¾ seers per head: below Line—adult male, 5 seers per head; adult female, 4 seers per head; average for children, 2½ seers per head. As regards cattle, the owners above Line give their cattle 2 chittacks of salt twice a month, and below Line the same quantity once a month. The cattle below Line seem to suffer a good deal from want of a sufficient supply of salt; they are not in such good condition as the cattle above Line."

LULLUTPORE.

Masoom Ali, Patrol:—"During the past year, both myself and my subordinates have made searching enquiries into the consumption of salt, both by men and cattle, above and below Line.

"Although the common people state their consumption at a very low figure, asserting as the reason for consuming so little the great difficulty they have in procuring this article, yet from the statements of the more respectable and reliable of those questioned, it would appear that above Line, within Customs' jurisdiction, the consumption per head of the population, men, women, and children, taken roughly, amounts to one and a-half tolas per diem, which is equivalent to 6 seers 13 chittacks per annum. With regard to cattle, the people assert that, in consequence of its dearness and the difficulties in obtaining it, they give none to their herds (only giving, when necessary, some small quantity to draught and laden cattle); unless, when opportunity occurs, they drive them out of Customs' jurisdiction, and there give them a feed. As regards the laden and draught cattle, they estimate the yearly consumption at 6 seers each, 4 chittacks being given twice a month. In villages below Line, the consumption of the population per head—man, woman, and child—appears to be about 4 seers 9 chittacks per annum, *i. e.*, about 1 tola daily; and here the draught cattle receive only one and a half seers per annum, 4 chittacks being given once every other month. From below Line, too, people sometimes drive their cattle above Line, out of jurisdiction, in order to give them a cheap feed of salt. The difference of consumption within jurisdiction, above and below Line, depends solely upon

the price of salt, which is much cheaper, even within jurisdiction, above Line. As to the appearance of the cattle, it would seem that those that are above Line, and get more salt, are rather fatter, and those that are below Line, and get a rather scant allowance, are somewhat leaner. The people who live below Line doubtless complain a good deal at not getting as much salt as they would like. But I must say that, in my opinion, matters are not so bad as they represent, because the result of my enquiries, and those of my Assistant Patrols, show that they do really obtain and consume the amount (4 seers 9 chittacks) above recorded; whereas many people profess that the poor people at times never get any salt at all, and state the general consumption at only half a tola per diem; and as to cattle, declare that they never get any at all. But these are all fabrications; really and truly, the consumption is about what I have above stated."

GOONAH. *Oolfut Hossein Khan, Assistant Patrol:*—"From investigations, and also with reference to the probability of the case, it appears that the consumption of people both above and below Line is the same, *viz.*, for each adult male or female at the rate of one-fourth chittack per diem, while children on an average consume half this quantity. People above Line, once monthly, give their cattle salt, in the following quantities, *viz.*: she-buffaloes 4 chittacks; draught and carriage cattle, 3 chittacks; and cows, 2 chittacks; calves, 1 chittack; and, if they find it necessary to give salt at intervals of 15 days, they only give these quantities each time.

"In places below Line, they only give salt every third or fourth month, but the quantities given at the time, or as a dose, are the same on both sides of the Line. People resident near but below Line, generally, when they want to give their cattle salt, drive them above Line. In the rainy season, unlike the rest of the year, they doubtless give the cattle as much as they like. As a matter of fact, no complaints of people resident in the neighbourhood of the Line, in regard to shortness of supply, deserve consideration, nor can any difference in the appearance of men or cattle immediately above or below Line be discovered. Even those who live below Line, and in its neighbourhood, always manage to smuggle 2 or 3 chittacks for their private use whenever they cross the Line, these small quantities not being interfered with. No doubt in the case of villages at considerable distance below Line, the cattle, owing to the difficulty of procuring it, get no salt, except a little during the rainy season; except, indeed, at the 'Dewalee,' at which date the poorest people even give some little salt, more or less, to their cattle. But this, of course, is given not with a view of improving the condition of the cattle, but as a good work, and a token of reverential worship of kine, this being a portion of the Hindoos' religious creed. Further, I understand that in most places far below Line there is no necessity for giving salt, fodder of all kinds being usually plentiful. Above Line, on the contrary, in the first place, cattle are few; in the second place, fodder is scarce, and for months at a time, the cattle live upon chaff; so that here, unless they got salt frequently, they would certainly suffer in health and strength."

BANDREE. *Mr. D. Reid, Assistant Patrol:*—"From personal enquiries made above Line, I find that salt is consumed by adults at the rate of 3 pice, or three-tenths of a chittack, per head daily, or about 2 chittacks weekly, amounting in a year to a little more than 6¾ seers; and children at the rate of 2 pice weight (I do not speak of the pucka pice, the Government coin); or one-fifth of a chittack daily per head, or a little below 5 seers in a year.

"Taking the two at an average, we find that a little more than 5¾ seers are consumed by each person. Below Line I find no difference in the rate of consumption, but I may add that both above and below Line the poor people tell me that this year they had not even the means wherewith to purchase grain for food, let alone salt, and that they have been obliged to eat their food for a week at a time without it, and when they did have a pice to spare, it was expended in salt, which had to do very often for a whole family.

"On making enquiries with respect to giving salt to cattle, I find that the people do not as a rule give salt regularly to them; but once a year, at the 'Dewalee' festival, each animal, if the owner can afford it, gets about 2 chittacks, and also when affected by a certain disease, salt as a medicine is administered. Cattle that are hard-worked get salt once a month, but in small quantities of about 1 chittack each. The petty traders tell me that their cattle get salt twice a year, once at the expiration of the rains, or just before they commence to work them, and again at the 'Dewalee.'

"The cattle about this part of the country are looking well, and do not seem to be in bad health; the cattle I have seen passing this from the north are exceedingly emaciated-looking compared to them."

SAUGOR.

Mr. Baness, Patrol:—"In entering on the question of consumption of salt, I find that quantities vary with the status of each family; and that, therefore, if any calculation is at all made, three distinct classes must have as many classified computations; for there can be no comparison.

"These classes stand in the proportion of 10, 60, and 30—*i. e.*, the rich, those with limited means, and those very poor.

"The first give without stint what they think necessary to themselves and their cattle; the second consume somewhat less, using just sufficient to prevent themselves and cattle falling sick; and the third, those who actually have not enough to maintain themselves and cattle in health. I, of course, give *my* experience; but to gain a true conception of the average consumption of salt per head of population, and of cattle, information must not be sought in the immediate neighbourhood of the Line, within circles influenced by smuggling, but it should be sought beyond their range and at remote distances below Line, *i. e.*, where the unremunerative distance is great, and virtually debars from smuggling the man who is too poor to buy a sufficiency of the salt he so much needs.

"The question requires abler handling than I can give it, and no doubt the opinions here expressed may be as easily set aside as they are already traversed from a different point of view, by those so clearly, logically, and conclusively deduced from more reliable data in the Commissioner's last year's review; but what I would respectfully urge is, that perhaps the treatment of the question may not be considered exhaustive when it is borne in mind that the statistics for Central India may be found inapplicable to the North-Western Provinces, Punjab, and *mutatis mutandis*.

"In the meantime I have tried to be exact in the data of the appended Statement of Consumption of Salt, Saugor Sub-division:—

ABOVE LINE.		BELOW LINE.					
The very poorest class.		*The rich.*		*Those with limited means.*		*The poor who strain a point to buy salt to keep themselves and cattle in health.*	
CONSUMPTION.		CONSUMPTION.		CONSUMPTION.		CONSUMPTION.	
Daily.	*Monthly.*	*Daily.*	*Monthly.*	*Daily.*	*Monthly.*	*Daily.*	*Monthly.*
Men.	Cattle.	Men.	Cattle.	Men.	Cattle.	Men.	Cattle.
1½ tolas.	Mds. S. C. 0 0 8	2½ tolas.	Mds. S. C. 0 0 8	1 tola.	Mds. S. C. 0 0 4	½ tola.	When sick or when breeding, about 4 chittacks.
For the year. 0 6 13·5	For the year. 0 6 0	For the year. 0 11 7	For the year. 0 6 0	For the year. 0 4 9	For the year. 0 3 0	For the year. 0 2 5	

"While dwelling on this subject I would state, that a description of sugar ('kutchi') largely used by the poorer population, sells at Jhubbulpore at Rs. 6-12-0 per maund, and the best description of goor, here and at Mundla in Central India, at Rs. 5 per maund; while salt, a necessary of life, is actually dearer at Jhubbulpore. Kansia sells now at Rs. 8-10-8, and Sambhur at Rs. 7 per maund.

"Again, if all else were wanting in confirmation of the above, I would only mention what is a well-known fact, that at the Tarokota cattle fair, held in December, the proportion of cattle which attend from below Line is hardly a fourth of those from above Line, and not near the size, as healthly, as strong, or as prolific. Want of salt seems to have a deteriorating effect on men as well as animals; and to remove the predisposing cause among the poorer agricultural classes, we should, in my estimation, cheapen the article, and increase its consumption by adopting relatively the system of reductions inaugurated by Sir Rowland Hill in the Postal Department, though, as in his time, it would not be at all wonderful if the first year showed a slight deficit, most amply counterbalanced by a marked increase added to each successive year. To gain this end, equallization of the duty seems indispensable, and its reduction to Rs. 2-0-0 per maund, throughout India, would in my opinion meet every requirement; so that, while we reduced the duty in the North-West and raised it from Rs. 1-8-0 to Rs. 2-0-0 for all Bombay and Madras, salts coming into Central India, the actual loss would be here, but 8 annas per maund, which the increased consumption all over India would soon cover. Such, at least, are my convictions.

"Among other matters, zemindars attribute a great number of the diseases among their cattle to want of salt. As for rumour, it is thousand-tongued, and whispers that the 'Gowalas' and 'Tehlies' about Seonee, Chiparah, Chutteesgurh, and Mundlah, give their own urine to cattle as a substitute for salt. It is certain that when the price of salt is at the high average of Rs. 7-7-4 per maund, and when the only wealth of these people consists in their herds (for money they have none), it is impossible for them to give even at the lowest rate of 4 chittacks salt a month to each head of cattle, when 200 or 300 heads constitute each herd.

"Such is the information. I do not know how far I am right in stating all this; therefore, I should wish it to be remembered that all I have urged has been with the view of enabling others more competent to discriminate between 'the wheat and the chaff,' as I am aware the data furnished are not as reliable as could be desired."

Tillee.

Mr. W. H. Harris, Assistant Patrol:—"I will now proceed to note as far as possible the proportions of salt consumed by the two poorest classes above and below Line. The very poorest class above Line, in regard to adults, use about 1¾ tolas per diem, which amounts to 10 chittacks in the month, and for the year 7 seers 8 chittacks; with regard to children, the quantity consumed on an average is about half, namely 3 seers 12 chittacks per annum. Cattle above Line receive 3 chittacks twice a week, which amounts to 12 chittacks per mensem; for the whole year 9 seers. The poor below Line, who stint to buy salt to keep themselves and cattle in health, I would note in regard to adults that they use about three-fourth of a tola per diem; in the month, 5 chittacks; for the year, 3 seers 12 chittacks: their cattle receive 4 chittacks accordingly. I would remark that the rates named above for those below Line refer to those of indigent circumstances, coupled with inability to smuggle profitably, from the great distance of their homes from the Line, I cannot apply to those living in the immediate neighbourhood, though below Line, and excludes those with better means, and the rich."

Gourhawur.

Mr. C. H. Holford, Assistant Patrol:—"The quantity of salt consumed below Line among the poorer classes, is under, and up to 1 tola a man a day; the richer classes eating about 1½ tolas. Cattle seldom get salt, and then not in regular quantities, four or five times in the year, unless if suffering from disease; then they get it oftener. Above Line, cosumption is a very little above that of below Line."

Deoree.

Mr. C. Kemp, Patrol:—"My enquiries regarding the consumption of salt by men and cattle show that there is no appreciable difference in the quantities used by men and given to cattle above and below Line. The class of men corresponding in means to Customs' peons use about one tola daily where they dine singly, and from about 0·7 to 0·8 of a tola where they dine several together. Poorer people use nearly the same

quantity. I think 0·75 of a tola is a fair average for the whole. Cattle generally do not get any salt; all, however, get it in quantities varying from 1½ chittack to a pinch on the 'Dewalee' festival day. Bullocks belonging to well-to-do people get one or half a chittack at a time, about three times in the year. The case is the same above Line. I see no difference whatever in the condition and health of the cattle above and below Line.

"Although the habitual use of salt as a condiment has made it a natural want to man, I doubt whether it is at all necessary to the health or condition of cattle. If viewed as a digestive, it ought to be used daily. If it is a necessary ingredient in the blood, a comparison between analyses of the flesh and milk of the cattle of saline and non-saline districts will show whether, if at all, the latter are deficient in it.

"The poorest classes, when questioned, complain of the dearness of salt, but admit that they use it regularly. People earning a sufficiency in food do not think of the price of salt. Salt might cost more in money now, but it is, nevertheless, continually getting less scarce, and considering the difference in the value of money, much cheaper than it was before, when the absence of roads and the dangers of traffic were obstacles to its reaching non-saline districts. I therefore entirely discredit the statement made to me by two or three, that formerly about one-quarter of a seer of salt used to be given to cattle weekly."

TENDOOKHERA.

Mr. W. S. Braybrooke, Assistant Patrol:—"In reply to this paragraph, I can state the following. I have made enquiries below and above Line, and my enquiries show the following; and it appears that a man eats the same quantity as a woman:—

1 man or woman, 8 chittacks per mensem,
1 child, ... 4 chittacks ditto;

Or 6 and 8 seers, respectively, per annum. Tendookhera has a population of 2,652 souls. Taking the average consumption per mensem for a man and child at 6 chittacks, we have as follows:—

				Mds.	srs.	cks.		
Average	@ 6 chittacks	×	2,652	=	24	34	8	per mensem.
			Mds.	srs.	cks.			
Or			24	34	8	×12 =	298	14 0 per annum.

This calculation shows that the consumption of salt at Tendookhera during the year amounts to 298 maunds 14 seers, and say 100 maunds more for cattle, &c., the consumption will come to 398 maunds 14 seers. The people say that this quantity is sufficient; the same quantity is used above Line. The utterly destitute above Line can always beg a little salt, but those below Line most depend on what they can beg on bazaar days and from traders. I have seen many with hardly a rag to their back going round to all the stalls on bazaar days, and begging from one a little grain, and so on, till they scrape together a meal. I will now turn to cattle, and endeavour to point out as explicitly as possible the results of my enquiries. To follow out my enquiries thoroughly, I have visited the mart of Kamorea, and five or six other villages in Bhopal, and have examined the cattle, having also previously looked at cattle eight miles below and near the Line. The men say they give 1 chittack per eight days, or more if they feel inclined. There are two kinds of cattle,—the grazing cattle, and cattle kept at home, watered, fed, and cleaned there, seldom if at all allowed to graze. These cattle so kept, both below and above Line, are in good condition, owing to their being supplied with water, grass, &c., in good quantities, but the grazing cattle must depend on what they can find; scarcity of water, bad grass, &c., have reduced the cattle below Line, and in the Bhopal territories, to a very poor condition. On asking if they gave salt in Bhopal, a man said—'If we cannot get good grass and good water for our cattle, what is the use of salt.' Without salt, or with salt, at the present time is the same. I do not speak of cattle just looking at one or two, but I

have seen 700 odd on the Bhopal side, and as many more below Line. The men here make no complaint as to scarcity of salt; their cry is for water now. Salt is very good for the skin, and keeps the cattle in a healthy state. The cattle belonging to Bunjaras (who certainly take more care of their animals) are in a most deplorable condition; they are worked more in taking grain to Saugor. Thousands pass here during the month with grain, &c., to Saugor and Bundelkund.

"The Inspector of the Police here, on my asking him about the cattle, said that at a place called Mainwari, on the banks of the Nerbudda, cattle were very fond of licking the banks, and that the Natives had told him that after so doing the cattle seemed to get very thirsty. I got some of the earth, and was in hopes of being able to find out whether it contained any salt; but this information I have not obtained.

"The information I have given has been gathered by me personally, and I trust it will be found satisfactory."

PALOHA. *Mr. W. B. Tritton, Patrol:*—"The consumption of salt per head of the neighbouring population below Line I have ascertained to be 1½ tolas per day, or a little more than 6½ seers a year, for every grown up man or woman, and half a tola for every child under 10 years; but I think the above is a little under the mark. I would give 2 tolas per day, or 9 seers per annum, to the former; and this, in my opinion, would be much nearer the truth. It is always impossible to get a straightforward or satisfactory answer to any simple question from a Native; *he will* suspect you of having some concealed motive for asking, and purposely gives equivocal replies. The above supply is considered fully adequate for all their personal wants, although I have heard frequent complaints that a much larger quantity (than I have stated even) was consumed when they got their salt free of duty; but they appear quite contented with what they get now. The quantity consumed above Line may be slightly in excess of the above, as the salt is to be had free of duty. The cattle, however, get more salt above than they do below Line. This is, of course, quite natural. The former, who pay no duty, give their cattle 2 chittacks per head every week; the latter, who have the duty to pay, can't afford to give their's 1 chittack in two months. Those that are very poor, and have only a single cow, or a pair of bullocks, never get salt by any chance all the year round. Of course those who are well off and well-to-do, give their cattle 1 chittack a week. It is a positive fact that all those who live within ten miles of the Nerbudda have recourse to a very singular expedient to give their cattle salt once a month at the furthest. The men of a village go and collect all the cattle, cows, bullocks, buffaloes, &c., and place them in charge of half-a-dozen or more of their own men, according to the number of cattle, and send them across the Nerbudda into Bhopal, when they give the cattle as much salt as they can eat, being provided with funds for the purpose, and after remaining a couple of days, return to their village with all the cattle. The amount paid for each head of cattle I have been unable to find out, but I have been told it is very small. This is done in all the villages every month, except in the rains, when the cattle have to go without salt altogether. Of course every time the cattle are sent across, different men are placed in charge; in fact, they take it turn about monthly. I have frequently noticed a slight difference in the appearance of the cattle above and below Line; the latter, as a rule, are always less healthy, and never so strong as the former. The cows when in milk suffer the most, and this is shown by their general appearance, and in the small quantity of milk they give, which is never so rich in butter as the milk got above Line. All this is attributable to the supply of salt being totally insufficient. There is not a single cow in the whole district that gives on an average more than 2 to 2½ seers of milk per day, but then they are all miserable-looking at the best. I have not seen a good cow since I have been here.

"Although the price of Kansia and Sambhur has been unusually high during the last three months, there has been no marked decrease in the consumption of salt below Line. The western salts having displaced the other two salts mentioned above, Kansia

is now disused below Line, but when mixed with the Bhurtpoor salt it sells readily, at a very fair price; in fact, it is the only salt now eaten by thousands of people, and it is only in the houses of the rich that Kansia is seen: elsewhere, the cry is for western salts mixed with the other salts, the comparatively low prices at which it is sold, placing it within reach of the poorest, who would otherwise have had to do without salt altogether. The supply of salt during the past year has been fully adequate to the demand."

Saen Khera.

Sub-Assistant Patrol in Charge:—"Although I have repeatedly inquired, from high and low, as to the amount of their annual consumption of salt, man, woman, and child, the invariable reply has been, 'who weighs his salt before eating it?' Some few, however, have given a sort of estimate of consumption, and some information has been obtained as to the quantity of salt actually consumed by our peons, who receive their supplies regularly from the same bunneeah.

"From these inquiries, it would appear that each adult male and female consumes $1\frac{1}{2}$ tolas daily, or 6 seers 12 chittacks per annum; and children half this amount. This is the amount consumed by people who eat Kansia. Sambhur salt, which being less saline in its properties, is eaten in larger quantities; $1\frac{3}{4}$ tolas being the daily average of adults, or 7 seers 13 chittacks in the year; and children, as before, half these quantities.

"This is the rate of consumption of the people both above and below Line, but the fact is, that the below-Line people, owing to the proximity here of Native States, every few days bring over as they can, without interference, a seer of salt for their personal consumption.

"As for cattle, the people below Line in this neighbourhood drive them across the Nerbudda into Bhopal, and there give them salt.

"The poorer classes doubtless, stint, themselves much in grain and clothes, but no one attempts to do without salt. The rich, of course, besides salt have other condiments, such as pickles and sweets, to flavour their food; but the poor man, who has only a little dal to eat with his bread, and often only dry bread alone, must have salt. In my judgment no one, poor or rich, high or low, above or below Line, gets less salt than he requires, as, indeed, is apparent from the fact that, having regard to the extent of sales and purchases effected, and Government duty realized, even this late great scarcity has not lessened consumption. I have observed no difference in the health and condition of the people above and below Line. Doubtless everybody, high and low, living below Line, grumbles at having to eat duty-paid salt when they see the people above Line eating salt free of duty; and the consequence is, that whoever questions the poorer classes immediately below Line, gets, as a reply, that they do not even see salt once in four days, while the rich complain that they cannot get as much as they want; whereas, as a matter of fact, out of one or two hundred people there may be two or four so poor that they don't obtain any salt for four or five days at a time. But in my opinion, the ordinary run of men who get a seer of flour a day, no matter how dear salt becomes, will rather somewhat lessen the quantity of flour they use than lessen the quantity of salt.

"Doubtless the rich people will only eat Kansia, whereas the poor will just eat Kansia, Sambhur, Blumbha or anything they can get; and just at present, it is chiefly Sambhur that the poorer classes here are using.

"As regards the cattle, there is doubtless this difference, that above Line they receive salt four or five times a year at least, while below Line, rich people find it too expensive to give salt more than twice or thrice, while poor people give it only once on the 'Dewalee;' the consequence of this is, that cattle below Line are thinner, and give less milk, than those above Line. The amount of salt given at any one time to the different kinds of cattle appears to be as follows: goats, 2 tolas; ponies, cows, and bullocks, 1 chittank; buffaloes, 2 chittacks. But these quantities of course vary, and are

of course diminished when salt is very dear. The full amount is always given in the rains, and also in cases of sickness."

OOMERDHA.

Sub-Assistant Patrol in Charge:—"Enquiries show that the consumption of salt in villages immediately above and below Line is, per head, adults 6½ seers, children 3¼ seers, per annum. But they no longer, owing to the scarcity of salt, put some of this into every dish they cook, as they did in former times, and of this these people undoubtedly complain a good deal. Moreover, amongst the very poor, it may sometimes happen that once in a way they fail to get even the allowance of salt calculated above, and they economize the use of salt in this way: they cook their food without mixing any salt with it, and when they eat their food, they first eat half-a-dozen mouthfuls of it, and then place a small crystal of salt in their mouths. Of course the people who live near the Nerbudda, and close to Bhopal, are not thus stinted, as they bring over for their own use half a seer or three-quarters of a seer at a time, free of duty. People who in former days used to give their buffaloes and cows two chittacks a week, now drive them once a month across the Nerbudda, and give them a chittack; and, owing to this diminution in the supply of salt, the cattle fail to eat their food properly, and remain more or less thin and weak. In the quantity of milk, too, a difference is observable, and cows and buffaloes now give one seer where formerly they gave two. As for the poor people, they give their cattle no salt at all."

HOSHUNGABAD.

Mr. E. C. Nunn, Collector:—"While out on my tour, I made enquiries in several places, both above and below Line, as to the quantity of salt consumed per head by the neighbouring population, but the result of the enquiries showed that little dependence could be placed on the information acquired; one person giving two pice weight (equivalent to about one tola per head) as the quantity consumed daily, another, when asked, describing the quantity by taking up a pinch of sand between the thumb and two fingers, which might be estimated at any quantity above or below the tola; but my own impression is, that the first-mentioned is about the correct quantity, which, upon calculation (taking two pice as the equivalent of a tola), brings the consumption up to a fraction over 9lbs. per head per year. The quantity consumed above and below Line, by all accounts, appears to be equally the same, and quite adequate to the wants of the people. The health of the population above and below Line, as far as came under my notice during my tour, appeared to be equally good. Again, as to cattle: I found upon enquiry that the people both above and below Line were in the habit of giving their cattle salt, but in this case, also, I found it a matter of difficulty to ascertain the correct quantity, the accounts given by several parties whom I questioned differing very much from each other; thus, some above Line in our territories stating, that from 1½ to 2 chittacks per head, once during the month, was what they were in the habit of giving; others giving the quantity at half a chittack per head every fifteen days; others below Line, 2 chittacks per head to draught and plough cattle, every eighth day during the ploughing season, and the same quantity every fifteen days to cattle of other descriptions. I have also reason to believe, from information gleaned by myself while on tour, and from mention made of the circumstance by the Sub-Assistant Patrol in charge of Mowa Khera, and the Assistant Patrol of Sheopoor, in their annual reports, that the practice prevails to a small extent in villages bordering on the Nerbudda, of taking cattle across the river into foreign territory for the purpose of giving them nonduty-paid and cheaper salt. From the above it will be seen that scarcely any difference exists in the practice of giving salt to cattle above and below Line, arising no doubt from the supply of salt on either side of it being quite adequate for the purpose. I did not find much difference in the condition of the cattle on either side of the Line. Indeed, in some few instances I found the cattle below Line looking better than those above; but this I am inclined to believe is the result of a more plentiful supply of pasture, and that of a better quality."

MOWA KHERA.

Sub-Assistant Patrol in Charge:—"It appears from enquiry, that among the villages bordering on the Line, above and below it, the average consumption of

salt for each adult man or woman is 6 seers 8 chittacks; for all children, 3 seers for the whole year; or each grown person, 1½ tolas, and each child 1 tola. This is the present quantity, but not in former years, when they were well and better supplied, although now there is universal complaint, more so among the poorer classes; among these last the quantity being regulated by a mere taste of the article, instead of a more free use as a condiment. In the villages situated on the river Nerbudda, something more is used, owing to the facilities offered by getting small quantities from these villages which are across the river in foreign States, and close to them. In the villages on the Line, and immediately below, where formerly every eighth day they used to give each head of cattle 2 chittacks of salt, now they drive them across the river once a month, and have limited their supply to only 1 chittack per head; this is, however, done only by the better classes, while it is entirely denied to those of the poorer sort, and in consequence of this scarcity of salt the cattle are suffering."

PATNEE.

Mr. W. McGeorge, Assistant Patrol:—"The consumption of salt per head of the neighbouring population, both above and below Line, is at an average of 4 seers per annum.

"They seem to think such supply quite adequate to their own personal wants; even the poorest can get it without any difficulty. No difference exists in the amount consumed per head above and below Line; they consume about the same quantity. The people of the neighbourhood, both above and below Line, do give a little salt to their cattle—about 4 chittacks in a year for one bullock, and that about four or five times during the year. There is not the least difference in the appearance of the cattle above and below Line, and the supply that now reaches them is quite adequate."

HOSHUNGABAD.

Mr. C. B. Stout, Assistant Patrol:—"From numerous enquiries that I have made on the subject, I have reason to believe that both men and cattle eat more salt in the Central Provinces than they do in the North-Western Provinces, but the difference is not great. The rains in these parts are severe and continue longer, and owing to the undulating nature of the country, and the water lodging in many places, the effects are felt longer; hence, I believe that, more particularly with cattle, the consumption of salt is greater in the Central Provinces than it is in the North-Western Provinces and other dry parts of India. I have, however, failed to find out that more salt is consumed above Line than below, and *supposing* such to be the case, there is certainly no difference in the condition of the cattle. To the contrary, I have frequently observed that if there was a difference, it was in favour of the cattle *below* Line; but this I attribute entirely to the superior description of fodder. At Sheopoor, or rather near to it, there is a patch of jungle which has splendid pasturage; the Line runs almost through the middle of it, and cattle thrive there, and are in far better condition than the cattle belonging to the Sheopoor village itself. Now, salt has nothing in the world to do with this. I know this from personal observation. The Sheopoor malgoozar is the richest man in *those* parts, and could afford to give any amount of salt to his cattle, but he has not any *good pasture land* to feed his cattle on during the rains, and is forced to send as many of his cattle as he can spare during the rains to hills some twenty miles away, those remaining at Sheopoor not being in anything like the condition his other cattle are on their return from the hills. As regards human consumption, I put the quantity actually eaten per man, woman, and child, per annum, at four seers, or 8lbs., of salt. Some hold a belief that a rich man eats more salt than a poor man; this I hold to be a mistaken idea. There may be a greater *consumption* of salt among the richer classes, but this I attribute more to *waste* than *actual consumption individually*. For instance, a rich man may have half-a-dozen dishes cooked and eat but one; the poor man prepares but one, and eats that one, so that the *actual* consumption is the same, the *waste* is a *luxury* with which we have nothing to do; and it is my firm conviction, that 8lbs. of salt per head per annum, in the Central Provinces, is about as close an average as will ever be got at.

Taking the population of the Central Provinces at say 8,000,000, this would give the consumption per annum of salt 800,000 maunds for man alone.

"Turning again to cattle, I think a fair average per head per annum, including all kinds, male and female, is 3 seers, or 4 chittacks per month all round. I have made my calculations from various enquiries among all classes of Natives, and from personal observation. To depend upon the former alone would be useless. I have asked a dozen Natives the question of how much salt each consumed, and how much each gave his bullocks, and their stories have been so absurdly different, that to make one's calculations on their statements alone would be impossible. I have known a Native to tell me gravely and seriously, that he had not tasted salt for six months, and on enquiry discovered that he had been twice committed to Court for smuggling, and punished! Hence the necessity for being most careful in sifting the stories told by Natives under different circumstances, and on a subject of which they are most suspicious as regards our motive in questioning them."

SHEOPORE. *Mr. H. A. Harrison, Assistant Patrol:*—"The consumption of salt above and below Line is on inquiry found to be 1 tola per adult for every man and woman, and one-half tola for every child of 7 years of age. Judging from the healthy look of the population, the amount is adequate to their daily wants. Cattle get at the rate of 4 chittacks monthly, during the rains and cold weather. They principally take their cattle across the Nerbudda for the purpose of giving them salt, where they get it at a cheaper rate. The cattle seem very well, as far as I have seen of them; not very stout, but this is attributed to the want of rain, and their not being able to get fresh fodder enough, but the amount of salt they get is quite sufficient. I think the river Nerbudda is only about three miles from Sheopore."

HURDA. *Mr. J. R. Harris, Patrol:*—"On this head, from most minute enquiries, the following is the result. The consumption of salt per head among the poorer class of the neighbouring population, both above and below Line, is, per adult male and female, 1 tola each per day; and a child about 8 years of age, one-half tola per day: among the richer class, per adult male and female, 2 tolas each per day. This quantity is fully adequate to their own personal wants, and as far as I have seen and ascertained, the population on both sides of the Line are healthy.

"Bullocks during the monsoons get salt twice a month, and to each is given 4 chittacks at a time. In winter, the same quantity is given but once a month; and during summer, about 2 chittacks to each bullock every second month. To cows and buffaloes, during the monsoons, 2 chittacks of salt is given every second month. I have found no difference in the cattle that I have seen, both above and below Line, and have always been told the above quantities are ample."

KHUNDWA. *Mr. C. Huckstepp, Assistant Patrol:*—"No complaints have been made by the population, either above or below Line, regarding shortness of supply of salt for personal consumption, but owners of cattle resident above Line, when questioned, complain that they cannot keep salt in any quantity to be ready at hand for the wants of their cattle.

"There is no difference in the consumption of salt per head of population above or below Line. The quantity consumed per head by males varies, and ranges from 4 seers 9 chittacks to 6 seers 8 chittacks per annum; the consumption by families, comprising males, females, and children, is less, and, one with another, ranges from 3 seers 8 chittacks to 5 seers per head. One reason for a less quantity sufficing for a family is that less food is wanted. Salt when used is mixed with food in either the preparation for, or cooking process, both as regards 'chuppaties,' pulse, and vegetables; the only exception to its use in raw food is in pickles.

"There is no perceptible difference in the health, strength, and appearance of the population above and below Line, or that of cattle similarly situated.

"Cattle fed on oil-cake, and in regular heavy draught-work, cart or plough, have a chittack of salt given them once a week as a provocative. Cattle under similar conditions of work, but fed on grain, gram, oorud, or mote, get a small quantity daily, amounting from 8 to 10 chittacks a month. Milch-cattle get from a quarter to half an ounce daily as a provocative, and to stimulate the flow of milk. At the beginning of the monsoons when the fresh green grass disagrees with cattle, it is usual to give those affected by the change of forage a few doses of salt, at intervals of a few days, as a corrective; the quantity given varies according to the necessity, and ranges from 2 to 8 chittacks during the season, for the disordered ones only.

"More than this salt is not used, nor would it be used were it ever so cheap. Cattle owners are of opinion that were it given indiscriminately under circumstances not calling for its use, it would overheat the system and prove noxious.

"It is well known that salt is a drug in the Rajpootana market. There its price does not enter into calculation in limiting its use as an article of food for man or beast, and is not the least bar to its unlimited use for the purpose.

"Owing to the famine now in Rajpootana, many of its inhabitants have sought a refuge with their cattle within our jurisdiction, and are plying as carriers in this neighbourhood. Rare opportunity has thus offered for enquiring as to whether they used to give salt to their cattle in Rajpootana, and whether they continue or discontinue its use here; and if so, the reason, and result for good or evil. The replies to my inquiries have been, that salt was sparingly given in Rajpootana; that it is not given in our territory, as it is not considered necessary; and that its discontinuance has not affected the health, strength, or endurance of their cattle, although engaged in heavy draught-work. No allusion was made by them to the relative dearness of salt under British and Native Governments, nor did they consider, even when asked, that locally the price of salt is prohibitive to its use; complaint they had, but it had reference to the scarcity and high price of 'Kurbie' (jowar culm) grass which they deprecated as being unnutritious."

BOORHANPOOR.

Mr. E. F. Grindlay, Patrol:—"From enquiry, it appears that there is no difference in the consumption of salt per head of the neighbouring population, both above and below Line; the quantity ascertained to be consumed by each adult male, monthly, is about 11 chittacks; by each female, 9 chittacks; whilst a child consumes about 5 chittacks; nor do they consider themselves stinted, but, on the contrary, consider it ample.

"With regard to cattle, people living in well-cultivated parts do not give their cattle any salt except in sickness, and then only about 1 chittack every three or four days, whilst those living in villages surrounded by jungle, or plains of rank grass, to which their cattle are taken to graze, usually give each head of cattle about 1 chittack every three or four days, at the commencement of the rains, until the grass becomes sufficiently nourishing, and does not cause too much laxativeness. This practice is equally applicable to both above and below Line; nor do the cattle suffer, if I may judge by appearances, from not being supplied regularly with salt."

NAGPORE.

Mr. T. A Martin, Collector:—"I made searching enquiries during my tour of the quantity of salt consumed per head by the population of the districts I visited, and from a perusal of the opinions recorded by the different officers of the Line, particularly those by Asghur Ally Beg, the Assistant Patrol of Bungaon, who seems to have taken considerable pains in finding out the actual quantity a man ordinarily consumes, I am of opinion that 6 seers for an adult, and 2 seers for a child between six and twelve years old, would be an approximate calculation of the quantity used per head in this part of the country. Convicts are each allowed per diem 120 grains in the Central Jail.

CONSUMPTION OF SALT.

"The cattle get salt once or twice during the rainy season, satisfying their cravings upon saline soil during the dry months; and for this purpose, every village has its plot of 'Chowpun' (a natural saline deposit).

"The milch-cows and buffaloes are made to lick salt daily during the milking-process, the practice here being to substitute the condiment for the calf. My own cattle get salt regularly twice a month, but are in no better condition than those of the villages I have visited."

ATNAIR.

Asud-oollah Khan, Assistant Patrol:—"The consumption of salt per head male and female adult, according to my enquiries among the people of these parts, both above and below Line, is 6 seers per annum; and they find it quite adequate to their wants, and remain in very good health, and do not complain of any deficiency of salt. They can get as much as desirable.

"Cattle especially get salt during the rains, about one handful in a fortnight each, and once in about two months in other seasons; or whenever cattle get sick, they give salt as a medicine. Only the working-cattle get salt at the rate above mentioned; also milk-buffaloes belonging to the 'Gowallahs,' receive about a tola every day just before milking. In the morning kine are not milked in this part of the country, and don't get salt until sick; but I do not find any difference in health and condition of the cattle of above and below Line, in the Government territory. Cattle of Berar are five times better-looking than any of these parts: they get very rich fodder there, and are not left to graze in the jungle, but receive allowance of cotton seed &c., &c., at home; while they don't get salt so often as here, but twice in a year, at about 4 chittacks each. They say that Bhooskie salt is much more nourishing than Kokun, but as the trade of the former has of late almost entirely ceased, consequently they are compelled to give Kokun."

PUTTON.

Mr. W. A. M. Palmer, Patrol:—Regarding the consumption of salt per head of men, women, children, and cattle, I have made strict enquiries round about. The men and women generally consume, above and below Line, at the rate of one-half seer per head per month, and find it quite adequate for their personal wants; the children at the rate of 4 chittacks, and they state they keep in very good health. The cattle they generally allow 4 chittacks, and that only four times in the year, and state that it does keep their cattle in a good healthy condition and appearance; this is for cattle such as for carts and for ploughing purposes, the rest of the cattle get it occasionally. They also state, that since Bhooskie salt has stopped coming, since the last two years, the villagers are obliged to give Kokun, which has not so much effect as when they would give Bhooskie, but are now compelled to give Kokun."

BUNGAON.

Usgur Ally Beg, Assistant Patrol:—"It now remains to ascertain the quantity of of salt consumed by a single person. Other enquiries have, I dare say, been made, and opinions expressed, but I rely on the test I have made in person. It should first be enquired in what proportions salt is used in the different kinds of diet used by Natives. The reply is, that in dals of all sorts, meat, and vegetables, excepting those which are acid, such as 'chook' and 'umbasa,' 2 tolas to each seer is sufficient; and in curries, with gravies and sour vegetables, 2½ tolas per seer, would be necessary. All classes do not consume the same quantity or quality of food, and the salt each uses must of necessity be in keeping with his diet: for instance, the residents of these parts do not use under 1½ tolas per diem; up-country people, on the other hand, use less than 1 tola; the reason is that Gonds and Koónbees, Mahrattas and Dhaors, &c., eat nothing daily but 'thoour' (dal) and 'jowar' (cakes). The latter being dry, cannot be eaten without dal or vegetables, so that, whoever uses vegetables freely, must use salt also in proportion. Chillies are used very freely in this country; these made into chutnee, require the intermixture of salt in equal quantities. The diet of a single man amounts to a quarter of a seer of dal, and a quarter of a seer of vegetables, and 1 tola chillies; and by this calculation, 2 tolas would be used by each individual. Should this fact be

disputed, I would on the other hand bring forward one of my own establishment, an up-country man (as an instance), who uses no more than 2 chittacks of dal with his cakes; but why this difference? Because the other uses wheat-flour, and eats only once a day; if they also (*i. e.*, up-country men) eat twice a day, the quantity of dal used would be increased to 4 chittacks per diem. The people of this part of the country, as a rule, cook twice a day. Again, it may be said, that if these men eat 4 chittacks daily of dal, and 4 chittacks of vegetables, the assumption would be that they fill themselves with these two ingredients, but this is not the case, for vegetables when cooked, are reduced to one-fourth the original weight, while 2 tolas of salt for every seer of green vegetable is the allowed quantity; each individual, therefore, with his 'jowar' bread consumes 5 chittacks of dal and vegetables, morning and evening, which is not excessive. The above is the diet of a single man who cooks his meals separately; but the quantity decreases in the case of a family to 1½ tolas per each individual, or 6 seers 13½ chittacks per annum. Having tested the aforesaid particulars in person, instead of depending on the declaration of the villagers, I can vouch for the truth of what I have asserted. Females consume as much, if not more, of vegetable and 'chutnee' as the men, but children eat no more than half a tola per diem, amounting to 2 seers 4 chittacks per each child in the year; cattle only eat about 4 seers 5 chittacks of salt per head in the year, during the rains, on two festival days, *viz.*, 'Okhoree' and 'Pala.' This may be countrary to the custom of other parts of the country, but the animals are strong notwithstanding."

JULALKHERA.

Sub-Assistant Patrol in Charge:—"There are 10 villages above Line in this section, and their population amounts to 1,000 souls, with 14 villages below Line, inhabited by 8,000 men, women, and children. A tola of salt per diem for each is sufficient, 1 chittack sufficing for a family of five; and no one complains of shortness of supply. Cattle get salt two or three times during the rains, at the rate of about 4 chittacks per each head, and this serves to act as a digestive, as well as gives them a better appetite; cattle which eat no salt fall off in flesh, and become useless. The quantity of salt given to cattle is quite sufficient to keep them in good condition."

ARVEE.

Mr. E. G. Young, Patrol:—"From personal enquiries made by myself when I was at Kowta, and from those made in this beat also, I have arrived at this fact—that the poorer classes in this part of the country do not feel the cost of salt so heavy upon them as might be imagined, considering that a common labourer can earn at least from 3 to 4 annas a day. I have also found that it is not because salt is dearer now than it was before the Customs Department was established in the Central Provinces that buneeahs, in supplying flour, dal, &c., to a wayfarer, charge for the pinch of salt also. I was told that the purchaser will himself insist upon paying for the salt he gets, and will on no account be prevailed upon to exclude its price, be it even one-quarter of a pice, as an item in the account he has to pay the buneeah for the supply of his food. I have also ascertained that the consumption of salt by an adult is two Company's pice in weight, which are equal to 12 mashas, or 1 tola per day. At this rate, the consumption in a year, or 365 days, is 365 tolas = 73 chittacks = 4 seers 9 chittacks; this in English weight almost amounts to 9lbs., which might very well be said is the quantity consumed in a year by an adult of the poorer classes, who can only afford one meal a day."

KOWTA.

Mr. J. D. Young, Patrol:—"The average consumption per head (calculations at the rate of 0·98 tolas per head per diem being the nearest calculation I have arrived at, after various and prolonged experiments) per annum, is about 8·71lbs. avoirdupois. I have not found any difference in the amount of consumption of the population above and below Line, so far as my enquiries have extended; and, having heard no complaints of the want of salt, I would opine that the supply is fully adequate to all wants. As to cattle, I learn that salt is *never* given except to sick or working cattle, and to cows after calving. This applies to cattle both above and below Line; and the reason assigned was that it was not habitual to give salt generally to cattle, as they thrive without it."

POONA.

Mr. F. W. M. Fallon, Assistant Patrol:—"It is impossible to ascertain the consumption of salt by the *individual* members of a family. The usual practice, in a family of three or four, is to procure a supply of one-fourth of a seer, which lasts them for eight days, a small portion being used every day to mix with the cakes, of which the whole family, men, women, and children, partake. This is considered ample for a family of five. The average consumption is increased by one-fourth of a seer per mensem. This practice obtains both above and below Line.

"Salt, both above and below Line, is as a rule only given to cattle once a year, that is, when the fresh green grass is springing up, at the beginning of the rains. A quantity equal to about 2 chittacks is given to every head of cattle; and this is considered quite sufficient to keep them in good health.

"There is no difference noticeable in the appearance of the cattle above and below Line; and when there is any, it is invariably attributed to the superior forage obtainable across the Wurdah.

"The farmers assert, that if they considered an extra amount of salt requisite for the benefit of the cattle, they would readily give it."

WURORA.

Mr. G. A. Nicholett, Assistant Patrol:—"The consumption of salt per head per annum of the population, both above and below Line, is from 5 to 5½ seers.

"The cause is obvious; there being no salt-mart in the immediate vicinity of the Line, the population on both sides obtain their salt from the same source, and which is from Wurora. Hence the people from above and below Line, buying from the same source at the same rates, consume equal quantities.

"Cattle that are used for loading and ploughing purposes usually receive about half a chittack of salt once in a fortnight, on either side of the Line. Cattle when inactive don't receive anything."

CHANDA.

Mr. W. S. Morley, Assistant Patrol:—"From the numerous and searching enquiries instituted by me in the matter of the consumption of salt, within and beyond Customs' jurisdiction, I find that in no one instance has it exceeded 8lbs. per head a-year, though a rice-eating population. This quantity is, however, far too much for residents of Upper India, as experienced from a close test. I have two men from Upper India in my service, whose consumption of salt I carefully scrutinized for four months; and they never used above a-quarter of an ounce each per diem, for their two meals, which is equivalent to 6lbs. per head, per annum. In my own case, I kept a memorandum of my daily consumption, and found that I consumed a little over half a pound a month, or say 7lbs. per annum.

"The people in this locality appear quite content and satisfied, and, amid my numerous enquiries, I never encountered any individual who complained of a short supply of salt.

"In respect to cattle, it is the practice to allow bullocks that are used for plough or draught a small quantity (about 2 seers per head per annum) of salt, at indeterminate periods during the rains.

"Milch-kine in rare instances receive salt (6 chittacks), before and after calving.

"The majority of the cattle, however, do not receive salt, not from any inability or disinclination of the owner, but as a rule. Again, it is the practice in certain localities not to allow salt at all to cattle. The cattle during the rains are made to visit patches of saline earth, and satisfy their cravings by licking the ground. By this I do not, however, wish it to be understood that every head of cattle that is made to frequent the tracks goes through the operation; on the contrary, it is a known fact that about 90 per cent. of them do not, but are driven there along with the rest, by the cowherds. The cattle all appear healthy, and in very good condition; in fact, there was no difference between those that do and do not receive salt, or lick the earth."

Mr. K. B. Mackinnon, Assistant Patrol:—"The averages I have obtained in the matter of salt-consumption are as follows:—For each adult person 0·4oz. per diem, equal to 12·16lbs. per annum; and for every child, 0·2oz. per day, equal to 6lbs. per annum. This is not thought much here, though on my enquiring whether they were not always thirsty, the invariable reply was that as they drank starch all day they didn't care for thirst, and that they must use salt since they had no seasoning herbs. No salt is given to other cattle than milch-buffaloes, and it is given very sparingly to these, as a sort of sop before milking."

Per Diem.		*Tolas.*
Per man,	...	2
Per woman,	...	2
Per child,	...	1

RAIPOOR.

Mr. C. B. Douglas, Collector:—"Both above and below Line the consumption of salt, as per margin, appears equal.

"From enquiry, I find that the retail price of salt in the different beats is on an average about 6 seers per rupee. All the Line Officers are unanimous in stating that the supply of salt imported by Bunjara traders quite suffices for the wants of the people.

"No vital statistics are kept for the Nurrah Circle, but those of Razim and Shawah, compared with Lown, show the rate of mortality in the former (56 per 1,000) to be greater than the latter, which gives a rate of 6 per 1,000.

"The increased rate thus shown is considered by the Health Officer of the district to be due to Shawah being in the midst of jungle, where decomposing vegetation, or organic matter, is the main cause of malaria. The farmers, and other cattle-proprietors of Chutteesgurh, are not in the habit of giving their cattle a daily allowance of salt, as the Natives of Hindoostan and Berar do. The reason of this is obvious. In this country, the bullocks and cows are of an inferior kind, costing at the utmost about Rs. 8 per head: should the farmer expend say 5 tolas per animal per day, his monthly expenditure would be 5 annas, and generally the poorest farmer has, say, 2 heads of cattle; the cost, then, would be 10 annas a month, or Rs. 7-8-0 a year, almost the value of a bullock, and this the farmer cannot afford to expend, not because salt is scarce, but because the animals here, to use the common phrase, are not 'worth their salt.' In Upper India and Berar, it is believed that farmers give their cattle a daily allowance of salt, but it must be remembered that the animals they own are valuable, of a good breed, and are worth caring for.

"Shepherds in this part of the country give their sheep a weekly allowance of one-half tola of salt per head; and farmers also resort to salt as a remedy when their cattle are afflicted with any malady. Dnring the 'Hurreealee' festival, which occurs once a year, the owners of cattle give their animals a treat of salt, and certain other herbs, but this custom is more closely allied to a religious observance than to regard for the animals' welfare.

"Allowing the consumption to be as follows:—

Each man,	...	...	2 tolas	per diem,
Each woman,	...	...	2 ,,	,,
Each child,	...	...	1 ,,	,,
Every sheep,	...	...	½ ,,	week,
Every cow, bullock, or buffalo,	...	...	5 ,,	annum;

Then, according to the census returns, which give the population and cattle per khalsa, petty zemindarees, and feudatories, the expenditure per annum at the rates above specified would be as follows:—

RAIPOOR DISTRICT.

Population and Cattle, &c.			Consumption. Maunds.
Men,	...	3,46,606	77,954
Women,	...	3,79,164	85,311
Children,	...	5,98,032	66,960
Sheep,	...	1,14,980	862
Cattle,	...	15,70,930	2,454
Total,	...		2,33,541

SUMBULPOOR DISTRICT.

Population.			Consumption. Maunds.
Men,	...	2,21,018	50,420
Women,	...	2,34,099	53,404
Children,	...	3,57,231	40,747
Cattle and sheep unknown,			...
Total,	...		1,44,571
Grand Total per annum,	...		3,78,112

"The total consumption, according to this rough calculation, amounts to 3,78,112 maunds. From the Customs' returns, and information obtained regarding Kokun salt, it appears that salt has been brought into the two districts as follows:—

"Bunwar, 1,93,861 maunds has *in toto* crossed the various posts; Kokun, maunds 25,000 from Nagpoor; total, 2,18,861 maunds.

"This calculation of consumption of salt is for the whole population of the two districts, but it must be remembered, that the amount of salt which pays duty is only consumed by people within Customs' jurisdiction, and north of the Line. The difference is therefore partly accounted for; and it must be remembered that there was a large stock of unsold salt in hand, and, that import of salt was checked by the rumour regarding the breaking-up of the Line, previously noticed. The amount said to be consumed per man appears to me to be at a maximum estimate; perhaps 1½ tolas per day would be a safer one for the whole of this Divsion.

"It must be borne in mind that the population in the Chutteesgurh portion of the Central Provinces are chiefly a rice-eating population, and it is well known that they consume more salt per diem than a wheat-eating population; moreover, the adult prisoners in the Raipoor Jail are allowed 200 grains of salt per day, *viz.*, one-ninth tola of salt, which is more approximate to the quantity denoted by me as a fair average.

"The population of the country within Customs' jurisdiction is taken from the Census papers for the Raipoor District, and approximately for Sumbulpoor also, and may be summed up as follows:—

		Miles.	
Raipoor District,	...	156	1,90,448
Sumbulpoor ditto,	...	112	84,400.
Total,	...	268	2,74,848

DHUMTUREE. *Mr. K. B. Mackinnon, Assistant Patrol:*—"The result of my own hurriedly acquired information on the subject of salt-consumption in this beat is, that the average daily consumption by an adult is about one-third of an ounce, giving an annual quantity per head of 7·61lbs. The people are said not to be in the habit of giving salt to their cattle."

ARANG. *Mr. E. J. Schneider, Patrol:*—"The average amount of salt consumed daily by each male or female adult below Line, is about 1 tola, children consuming half that quantity; so that throughout the year the amount consumed by each grown-up individual is 9⅛lbs., and by children 4½lbs. This supply for a Native I think barely sufficient. Salt being cheaper and more easily procurable above Line, the amount consumed there by an individual, male or female, per day, is about one-half tola more than that used below Line, but I scarcely think this difference makes any noticeable difference in the health of the two populations. In reference to cattle, as far as I have been able to enquire, I am told that both above and below Line the villagers are not generally in the habit of giving their cattle salt, as they consider Kurwah oil more beneficial for them: the Bunjaras are the only people who allow their bullocks any salt, and this only three or four times during the monsoons. The average amount given to each bullock in the year is 2lbs.; each time about half a pound."

SANKRA. *Mr. A. Weston, Assistant Patrol:*—"The quantity of salt consumed by an adult, both above and below Line, being 1½ tolas, and children one-half tola, which they consider adequate to their wants. Cattle above Line receive one-quarter of a seer of salt, and below Line, 3 chittacks, occasionally. I may add, that owing to the great drought last year, and the famine prices which now prevail, many of the poor villagers have suffered greatly. I have myself questioned many as to how they manage to sustain themselves in these jungles, and have invariably been informed, that they live on wild

berries, *viz.*, thalka, tandoo, and the roots of the camdah tree, whilst others live upon the flesh of animals they succeed in killing with bows and arrows, and sometimes exchange the flesh for rice, &c. These poor people, I verily believe, do not taste salt for months together, and, with scarcity of food, are in consequence reduced to living skeletons."

Sohilla.

Mr. A. E. Monro, Assistant Patrol:—"I now approach rather a delicate subject, namely, the consumption of salt by the population living in the immediate neighbourhood of the Line; and in dealing with it, I would premise that, having returned to Sohilla but a few days ago, I have had neither the time nor opportunity to institute detailed and searching enquiries into the matter, nor did my *locum tenens* exert himself in it, although he was in charge of the beat for six months; so that what I am about to state is the result of limited enquiries made by myself since my return here. The quantity of salt consumed per annum by each adult male and female, would seem to be from 10 to 12 seers; the quantity consumed by each child during the same period being about half that quantity. It will, perhaps, be thought that this rate is too high; but the reason assigned for it by the natives is, that as their diet consists solely of 'pukhal,' *i. e.*, boiled rice and water, they are obliged to use large quantities of salt to compensate for the absence of other condiments, which a more generous diet would necessitate. No complaints have ever been made about a shortness of supply of salt, and there is no visible difference in the health and aspect of the populations on either side of the Line. They do not give their cattle salt, except when disease breaks out among them. They did not give their cattle salt even before the laying down of the Line; so it is evident that the presence of the Line has made no difference in this respect."

Internal Dept., N.-W. P.
Agra Circle.

Mr. R. M. Adam, Deputy Inspector:—"During the year, I have made many enquiries in my circle, both above and below the Customs' Line, regarding the consumption of salt; and the result of my enquiries, noted from time to time, shows that villagers use from half a tola to a tola per day, or from 2·25 seers to 4·5 seers per annum. Well-to-do people tell me that they consume more than this. They may possibly *purchase* more than this, because they can afford a variety of dishes at a meal; but here the question suggests itself, do they really *consume* more than 4·5 seers per annum in their food? Flesh-eating castes, like Mahomedans, Kayths, Kulwars, &c., use less salt than castes who indulge in purely vegetable diets.

"Small quantities of salt are occasionally given every third or fourth day to working cattle; but I have seen well-conditioned cattle above Line, where salt was selling at 14 annas per maund, which their owners assured me never received salt unless when they were sick.

"So far as I could ascertain, herd-cattle never receive salt, unless as medicine, or sometimes a little at the beginning of the rains.

"As far as I am able to judge, I fail to perceive any difference in the physique of the men or cattle above or below the Customs' Line. The men and cattle in the neighbourhood of Futtehpore Sikree, above the Customs' Line, where salt is sold duty-free, or in the neighbourhood of the extensive salt deposits of Furrah, on the banks of the Jumna, below the Line, and within Customs' jurisdiction, where men and cattle can and do obtain, by petty illicit manufacture, as much salt as they can possibly consume, look not a whit better in appearance than those well removed below the Line, beyond Customs' jurisdiction, where duty-paid salt is consumed."

Allygurh Circle.

Mr. G. A. Bradford, Deputy Inspector:—"My enquiries both here and at Furruckabad, touching individual consumption of salt, have been steadily prosecuted among all classes of the population, and in every direction the supply everywhere was plentiful; and not a single instance can I record of persons stinting or denying themselves the use of salt on the plea of its being beyond their means. My investi-

gations have led me to fix from 4 to 4½ seers as the average consumption per head. So far as my enquiries extended, I learnt that salt was not periodically given to cattle. They got a fistful at odd intervals, not because it was deemed too expensive for the purpose, but simply because the cattle did not need it. They got it as often as its administration was considered necessary."

BOOLUNDSHUHUR CIRCLE.

Mr. R. V. Freeander, Deputy Inspector:—"I have patiently enquired, throughout the four Zillahs of Boolundshuhur, Meerut, Moozuffernuggur, and Saharunpore, about the individual consumption of salt by all classes of men, and set my establishment to enquire independently. The following is the result:—A pice weight per diem, or 4·56 seers per annum (five pice being equal to one chittack) seems to be the standard, as it were, among the labouring and lower classes of men, but few state they consume more, while many less, just as some say they eat a seer of attah, while others 12 chittacks. When they have dal, sâg, or other vegetables, the salt is put in that, and eaten with the bread. When these accessories cannot be obtained to the poor man's meals, which I fear is too often the case, the salt is put into the bread itself. Women can and do consume as much as men. In families, the food for all the members is cooked together. I cannot get approximate estimation for children, as they vary so much in size and age. The numerous parents I have questioned on this subject, say their children eat from a portion cooked for themselves, of which no account is taken; but, after the fashion of carrying companies, they may, I think, pretty correctly be put down at half-price, or half a pice weight per diem allowed to a child. The number of adults in the four zillahs of this circle, according to the last census, men and women, were 22,41,477; children, male and female, 12,51,292. The above scale will give the consumption for the former to be 3,41,534 maunds 10 seers 1 chittack, and for the latter 74,342 maunds 8 seers 10 chittacks per annum, the whole consumption amounting to 4,15,877 maunds 18 seers 11 chittacks.

"I have been unable to get the number of sheep and goats in this circle, but the numerous shepherds I have questioned, and from reports of my Native officers, I find the salt given is mostly the cheapest kind prevailing in the different pergunnahs, but kharee is never given. Though the statements of shepherds with regard to giving salt differ materially, in other respects they all agreed that kharee was never given to their flocks, except where other salts are known under the name of kharee, as in and about Bagputt. Some say they never give their sheep any salt whatever; others, again, two pice weight, once or twice a week, during the monsoons, to prevent swelling of their throats and distension of their stomachs, occasioned by their over-feeding. Others state they give one chittack per mensem during February and March. Salt is seldom given by any during summer, because it creates hunger and thirst at a season when fodder is scarce, and would cause the sheep, according to the shepherd-phrase, 'to break their knees,' which means, to lose the power of their legs from weakness. Some give it to their sheep once at the close of the monsoons, as a cathartic. The difference in practice of giving salt appears as follows:—Where land is very saliferous, no salt is given; where kharee and reh lands are extensive, they give salt during the rains; on light sandy soil, they get it during February and March. With one or two exceptions, all the men questioned, say more salt would be injurious. On further questioning, even these men owned that their sheep suffer no injury by not getting more salt. It is not likely that men, wealthy in possessing flocks and herds of sheep and goats, farm-cattle, &c., could not afford to purchase sufficient salt to keep them in health, when the cost is so trifling. Milch-cows and buffaloes seldom or never get salt. Hindoos in many cases only give it to their plough and well-bullocks twice a year, about 2 chittacks each time, during the 'Holee' and 'Dewalee' festivals. Hackery-bullocks generally get 2 chittacks about twice a month, when fodder is cheap, which act as a tonic. Old men, zemindars, and farmers, say they never give salt to their plough or well-bullocks. If these men or their forefathers had been in the habit of giving it, and discontinued

it on account of its dearness, some of them would not have forgotten to mention it. As salt has a tonic effect on animals, it is necessary to give more to pen and stall-fed, used, or intended for pleasure, show, or the butcher's knife. The quantity given to sheep, goats, and cattle in Europe, would kill the hard-worked and poor-fed in this country. This is well understood by cattle owners, whose flocks and herds have chiefly to depend on pasturage for subsistance, which is scarce during summer. As soon as fodder becomes dear salt is stopped. I am satisfied, from pains-taking enquiries, if the price of salt was reduced to two annas a maund, the increase of consumption in human food and for animals would be very slight. Imbibed old customs in different places seldom change, and the price of salt falls so lightly and equally on all classes, according to their means. The quantity of salt required to keep a man or beast in health is so small, that a slight rise or fall would scarcely be felt. The cheapest salt, however low the rates, will always find favour among the poorer classes of people for their food, and among all classes for the use of their cattle. Horses get more salt than other cattle. Those kept for pleasure or military purposes are well fed; those that go in public vehicles, or are kept for hire, have not time allowed for them to eat plentifully and to digest their food. Salt assists the latter process, when the animals come home tired, and jaded. The allowance for a horse is generally half a chittack twice a week, or 3·25 seers yearly. This quantity is allowed to Government horses in studs throughout India. In the wild state, animals thrive, fatten, breed, and locate themselves where salt lands are not within many miles. They may migrate for a short time to places where salt abounds; but this is doubtful. Taking the longest admitted period, eight months in the year, when salt is beneficial to sheep and goats, and allowing the very dearest rates for Kuteela and Sooltanpooree salts—which are generally given to them and are as good as any other for that purpose—at the highest rate for distant Provinces is 7·25 seers per rupee, the cost for a sheep or goat per annum, would be 3·531 annas. In these parts the dearest rate is 9·625 seers per rupee, at which the expense for each head would be 2·73 annas. For draught animals 4 chittacks per mensem is allowed. This is on all sides agreed to be ample; for which, at the dearest rate, 9·625 seers per rupee, would come to 4·987 annas per annum for each."

Budaon Circle.

Mr. W. B. Jones, Deputy Inspector:—"From enquiries made throughout the district, from those in affluence and from the poorest now at the relief works, I find that 3 seers of salt is about the average quantity consumed by each adult during the year, and 1¼ seers by each child. This quantity, they assured me, was enough to keep them in comfort, and what they had always been in the habit of using. I did not hear of a single complaint of shortness of supplies; in fact, salt can be had in large quantities in even the smallest villages where there is a bunneeah. When there are none, the villagers generally resort to fairs, where they barter cotton and grain for their weekly consumption of salt: this is the practice in these parts.

"Salt is never given to cattle in this district, except when working in the plough or in carts; then the allowance is one-quarter of a seer every eighth day. This, to my knowledge is the case all over India. It is not used medicinally but in very rare cases, but as a condiment, so as to make the animals eat their food with relish. Some of the old inhabitants of these parts assured me that cattle that graze in herds have never been allowed salt; they have sufficient saline substances which the cattle are fond of licking. This I have frequently noticed myself, where '*reh*' earth abounds. Cattle, beyond those that are used as draught, wear the same scraggy appearance all over India; it is not that the natives cannot give them salt, but they wont. The act in their eyes would be unpardonable if they were to spend money for this purpose."

Mynpoorie Circle.

Mr. C. M. Smith, Deputy Inspector:—"With regard to individual consumption of salt, the most earnest, patient, and pains-taking enquiries were made throughout the districts of both Etawah and Mynpoorie. The quantities consumed by adults, male and female, vary in some pergunnahs; but the proportion for children appears

fixed at one-quarter of a tola for each child; while for adults, half a tola, three-quarters, and 1 tola; so that, on the whole, I would fix the limit at three-quarters of a tola each—an equivalent to 1½ seers in the former, and 3½ seers each per annum in the latter case. The well-to-do use Sambhur, and the masses Bhurtpore or Kuteela, and refinery salt. Again, the quantity given—

"To plough-bullocks, may be fixed at 2 chittacks each once a month, as a condiment, or 1½ seers per annum.

"To cart-bullocks, 2 chittacks once a week, as a condiment, or 6 seers per annum.

"To buffaloes in milk, 1 chittack once a week, as a condiment, or 12 chittacks to 1 seer per annum.

"To cows in milk, 2 chittacks in a month, as a condiment, or 1½ seers per annum.

"To pack-bullocks, buffaloes, and ponies, 2 chittacks once in fifteen days, as a condiment, or 3 seers per annum.

"To bhylee and ruth bullocks, 3 chittacks every fifteen days, or 4½ seers per annum.

"To camels, 3 chittacks once in two months, or say 1½ seers per annum.

"To dâk gharry horses, 2 chittacks per week, or 6 seers per annum.

"For sheep and goats, as a rule kharee is always given; in some few instances salt.

"In the cases of cattle, noted above, the salt is given purely as a condiment, and medicinally in admixture with 'mussalahs,' or ingredients, whenever occasion requires it. Of course, it is given in larger or smaller quantities in different pergunnahs, according to the means of their owners; but I believe I have struck a fair and conscientious average. The very poor among villagers give as a substitute a preparation from the ashes of an herb called 'bhutkuttiah,' potash, and 'kanchnonah;' the latter being a description of white salt produced from the glass manufactories, or 'kanch chutties.'

"This salt is obtained in the following manner:—The efflorescence which forms on the surface of oosur lands being scraped up, it is strained and deposited in shallow 'kyarees,' or vats, flush with the soil, and water poured in to allow of this oosur earth being sufficiently coagulated. After it has become well saturated, it is pressed down by treading with the feet; and, when thoroughly kneaded, it is left to bake in the sun. Eventually, the upper crust is scooped up with a 'khoorpa,' *i. e.*, weeding implement. The crust obtained is styled 'russee' by the majority, by some 'pupree,' and the process is protected by license from this Department.

"It is this 'russee,' or 'pupree,' which, in admixture with saltpetre and alum, is made to undergo a fiery ordeal for about 48 hours; when allowed to cool, a vitrious deposit is left, and a salt forms on the surface known as 'kanchnonah.'

"As to complaints of shortness of supply, it would be marvellous to find a body of natives who had *not* a 'complaint' of some kind or another to prefer, and who, assuming a kind of saintly waggishness, are notoriously subject to that confusion of ideas, or to say the least of speech, to which natives and garrulity are liable. With these I shall have nothing to do, but confine myself to the more intelligent and educated classes, who can form a judgment, and do not complain that their means will not allow them to procure salt, but they wish to see it cheaper. They say that ten or twelve years ago salt was more readily obtained; and this I take to mean that, when supervision over illicit manufacture was not so rigorous as now, kharee, russee, and saltpetre works generally threw into the market large supplies of impure salt, known under the name of 'kharee.'

"Cattle during the past years have not looked flourishing, as they were worked night and day at fields and wells when famine was most dreaded; their fodder was cut down, and the grazing lands parched, which sufficiently accounts for their ill condition."

Furruckabad Circle.

Mr. C. G. A. Durant, Deputy Inspector:—"From the observations I have been enabled to make whilst on tour, relative to Circular 62 of 1868, I find that the average daily individual consumption of salt, throughout this circle, is about one-twelfth of a chittack per child, and one-fifth of a chittack of salt for each adult of the population; which proportions will give close on 1 seer 14½ chittacks as the yearly consumption of salt by the former, and 4 seers 9 chittacks by the latter. A man well-to-do will consume more salt in proportion to his family than one of a poorer class, and this result is in the natural order of things; for, to the rich man, three or four annas more or less expended in the purchase of salt makes no perceptible difference; whereas, the poor are obliged to look very sharply after every pice in order to make the two ends meet. The wealthier individual obtains his supply of salt from his bunneeah at the current rates of the day; whereas the labourer or agriculturist depends for his quantum on the peddler, who comes round to his village and barters his wares and merchandize, such as sugar, tobacco, salt, &c., in exchange for grain,—the proportions usually being one-fourth of salt to three-fourths of grain, and, considering the relative price of salt and grain, the former averaging 7½ to 8 seers, and the latter 10 to 12 seers, per rupee, a very considerable profit is realized by the itinerant trader. Salt, as a rule, is never given by the rural population in this circle to their cattle or sheep, except in cases of illness, and even then 'kharee-non' is preferred, as having greater medicinal properties."

Allahabad Asst. Commr'ship.

Mr. T. B. Ray, Assistant Commissioner:—"Concurs in the views held by Mr. F. Hardingham, Deputy Inspector of Jounpore."

Cawnpore Circle.

Mr. C. P. Ashton, Deputy Inspector:—"We have great difficulties to encounter in *solving* such a question as the individual consumption of salt, and obtaining reliable data. As it is, the Customs' official is looked upon by the people as a supernumerary—a functionary, in short—whose presence could very well be dispensed with; but when that officer begins to pry into their domestic matters, by trying to ascertain the exact quantity of salt each individual consumes, they at once *assume a position proof against any cross-questioning*, concluding, at the same time, that Government might have some object whereby their interests are likely to suffer, in making such inquiries; and therefore, they take very good care to qualify their replies accordingly. On the other hand, you have only to be a little credulous, and they will soon use their endeavours to make you believe that they have been subjected to all sorts of hardships since the introduction of the salt tax. However, in spite of the many oppositions, this matter has been seen into, and such results as have been obtained will now be offered. Every native I have yet asked—and I suppose within the past six months some hundreds of all classes have been questioned by me—has said that salt equivalent in weight to a Nawabee pice was what each adult consumed daily, and one-half that quantity was considered sufficient for a child twelve years of age. Now, Nawabee pice vary in weight, just as beans do, but approximately each might be said to weigh three-quarters of a tola, or 9 mashas; so that at a rough calculation 3½ seers per annum is the quantity consumed by each adult. When every native, no matter how poor he is, on being asked what quantity of salt he consumes, answers that salt equivalent in weight to a Nawabee pice is the quantity daily consumed by him, I should say that more reliable statistics could scarcely be obtained.

"Inquiries have also been made as to whether the people of these parts are in the habit of giving their cattle salt; and one of the broadest facts deduced is, that such a practice was never systematically resorted to. It is true, however, that some cattle do to this day get salt at periodical intervals, but those which get it form quite the

CONSUMPTION OF SALT.

minority, probably not more than one-twentieth of the mass; and the thing to be observed is, that those who give their cattle salt are people who can at the same time afford to give them a sufficiency of food; and, even then, the working bullocks are the only beasts to which salt is given as a condiment, in proportions of from two to three chittacks per beast, every seventh or eighth day. The salt, when given, is never weighed; but the quantity a man can hold in one hand when clenched is considered sufficient for one beast. It is equally true that a large body of the population cannot afford to give their cattle salt; but when it comes to be considered that there are people who cannot afford for their cattle a sufficiency of food, what good, then, would salt do the thriftily-fed animals? Salt is, after all, but a condiment; it cannot supply the place of food."

ALLAHABAD CIRCLE.

Mr. H. Browne, Deputy Inspector:—"On the subject of individual consumption of salt, I find from inquiries, instituted both by myself and my Sub-Deputy Inspector Mahomed Oosman, that on an average a dumree's worth of salt is consumed by an adult per diem, which gives 4½ seers for the year. As for cattle, I know from my own experience of them that they seldom get salt, unless it be for medical purposes, and now and again a very small quantity is given to milch-cows, and to beasts that are in the habit of carrying heavy burdens. I have never yet heard a native complain of the scarcity of salt, as stated by many district authorities; whereas, I have often heard them do so of fodder, which is so scarce in many parts of the country that the cattle actually die from starvation, and not for want of salt, as is generally supposed."

BANDA CIRCLE.

Mr. H. S. McCheane, Deputy Inspector:—"To obtain the necessary information required by the Commissioner of Customs, in his Circular No. 61 of 1868, I spared neither time nor labour. I had the circular, immediately on its arrival, translated into the Vernacular, and copies forwarded to each Sub-Deputy Inspector, with directions that during their tour they were to make notes of their enquiries and observations regarding the several points mooted in said circular; they were also to require of all subordinate officers in their districts a like method of obtaining the desired knowledge, and all were to submit their written reports to me at the close of the season. From those papers now before me, and from what I gleaned by personal enquiries during my own tour, I have arrived at this conclusion, that the average quantity of salt daily consumed by each adult male and female is one rupee's weight, and half that quantity for children. This supply the people do not consider sufficient for their wants. They state, also, that now they do not give salt to all their cattle, but merely to the hard-working ones, and not oftener than once or twice a month as a condiment, about 2 chittacks at a time; and when kharee can be procured, they give it as a substitute for salt, as the latter article has now become so dear. Further, that formerly, when salt was cheap and plentiful, they gave it to all their cattle once a week, 4 chittacks on each occasion, and that the condition of the cattle then was far superior to their present state."

JOUNPORE CIRCLE.

Mr. F. Hardingham, Deputy Inspector:—"On questioning the educated classes, or men well-to-do, *i. e.*, zemindars, bunneeahs, &c., as to the quantity of salt consumed per day per adult, the answer invariably was one-fourth of a chittack; this gives 6 seers a year, at a cost of Re. 1.

"The ignorant, or lower classes, *i. e*, cultivators, &c., on the other hand, limited it to a dumree's worth a day; this gives 4½ seers, or 12 annas a year.

"In the Benares District, the common people always assert that they consume one pice *weight* a day (familiarly known as a 'chootkie'); this, at the rate of nine pice weight to a chittack, gives 2½ seers, or 6 annas 9 pie.

"The difference between the dumree-worth of Jounpore and the 'chootkie' of Benares is, in my opinion, simply a difference in colloquialism, signifying in both a small quantity. Personally, I estimate the true average of expenditure everywhere at

one anna the month, or 4½ seers the year; for, on questioning domestic servants, our own establishment and others, as to their different items of monthly expenditure, one anna is always put down for salt.

"On asking my 'dumree' and 'chootkie' informants whether they desired any greater quantity to make their food palatable, the answer was either a blank stare or a frank denial.

"In respect to cattle, I have made strict enquiries in both districts, and it has reduced itself into the fact that 'kharee-non' is given medicinally, not to all cattle, but only to those giving milk or carrying burdens, and never oftener than once a week, and about a chittack in quantity, mixed in either a lump of 'urhur atta' or 'jow bhoosee.' It stimulates the appetite, which is the great object with milch or draught-cattle, and prevents itch or mange. As a general rule, all Hindoos give salt (kharee) to their cattle at the festival of 'Punchummee' in July, so that rain-water should not disagree with them; otherwise, except in the instances I have noted, *salt is not given.* To satisfy myself thoroughly on the above points, I visited the residence of a private servant, by caste an Aheer, whose family possess a large number of cattle, and who could have no object in stating other than the truth; besides, I invaded the privacy of a colony of Aheers, living close to my bungalow, and both accounts tallied with the information I had previously gained. Goatherds use salt only when there is fear of scab or mange attacking their flocks. The cattle everywhere looked healthy, and even the cattle-plague, which affected the neighbouring districts so widely, passed over this circle with a sparing hand; but nowhere were the diseases or death of cattle attributed to the want of salt, which is cheap enough if they wish to give it; the inferior kharee of these parts selling at twelve annas the maund."

GHAZEEPORE CIRCLE.

Mr. E. W. Cleveland, Deputy Inspector:—"With regard to the consumption of salt by the people hereabouts, I beg to state that the result of my enquiries into the matter goes to prove that all classes partake freely of the condiment. One pice weight I find to be the average quantity consumed by an adult per diem, giving an annual consumption of 4·14 seers per head. The poorest seldom use less, or the wealthy more. The average selling rate of salt here is eight pice weight per pice (Goruckpoorie). At the rate of one pice weight per diem, one pice worth of salt would do for an adult eight days. The annual expenditure per head for salt would at this rate amount to 45·62 pice, or 10 annas and 1 pie. During the course of all my enquiries, which have had reference to the very poorest classes, I have met with no instance of anybody denying himself the use of salt on account of the dearness of the article.

"As regards cattle, I do not find that salt is given to them in this part of the country, except a chittack occasionally to milch-cows and buffaloes after calving, to increase the secretion of milk. Cartmen give their bullocks a handful of salt once a year, on the occasion of the 'Dewalee' festival; but the observance is intended rather as a religious ceremony than as conducing to the health of the animal. Kharee, however, appears to be given to draught-bullocks once a week, in quantities varying from 1 to 2 chittacks."

GORUCKPORE CIRCLE.

Mr. J. Cooper, Deputy Inspector:—"The salt that enters this circle for consumption appears to be quite sufficient for the population. At least, from the enquiries made all over the circle, no one complains of the scarcity of salt; it seems that it has got somewhat dearer than what it used to be formerly. No one gives salt to any animal daily as food, but occasionally it is given in the shape of medicine.

Oudh Asst. Comm'rship.

Mr. D. Hay, Assistant Commissioner:—"This subject has been so fully treated on by me in other reports, that I will dismiss it with the notice that, although 4½ seers per head per annum is the consumption, yet the actual expenditure is not less than 5 seers."

LUCKNOW CIRCLE.

Mr. T. B. Dawes, Deputy Inspector:—"The following is the result of the numerous enquiries I have made regarding the consumption of salt amongst the natives in Oudh:—

"An individual getting, say, Rs. 30 per mensem, consumes between himself and a wife one Lucknow pice weight of salt, equal to 274 grains; so each person consumes 137 grains. Several persons eating together, one-eighth of a pice worth daily, in one-eighth of a seer of dal each; so each consumes equal to 190 grains.

"Several persons use six cowrie's worth of salt daily; therefore each uses equal to 143 grains. Eight men boarding together, consume 1 chittack of salt; therefore each uses equal to 120 grains. A poor cowherd, with a wife, and two children of say five and six years of age, uses one pice worth in five days; take the two children to be equal to one adult, therefore each adult consumes equal to 101 grains. A native getting Rs. 70 per month, with three persons dependant on him, uses half a chittack daily; therefore each consumes equal to 120 grains.

"I am satisfied, from the enquiries I have made, that no scarcity of salt exists in this circle; and that all classes, even the poorest, obtain as much salt as they wish. The personal consumption per head of the people does not appear to exceed 4½ seers, or 9lbs. per annum, and which is believed to be amply sufficient for health and taste.

"The following is the result of my enquiries in regard to the salt given to cattle during the Nawabee and the present time:—

"*Nawabee.*—Cattle belonging to salt manufactories, which were worked incessantly at the wells, got at the utmost 1½ seers of salt annually, to sustain their appetite.

"All over-worked cattle got about 6 chittacks during the year. Milch-kine got 2 chittacks of salt twice, just before calving; the milch-kine are reckoned to be in the proportion of one-fourth of the other cattle. Cart and pack-cattle got at most 1 chittack weekly.

"*Present time.*—Cart and pack-bullocks get 1 chittack of salt every fortnight, or 1 seer 10 chittacks per annum. About half the number of milch-kine get salt, equal to 2 chittacks, compared with the number that got salt during the time of the Nawabee. Over-worked cattle get 3 chittacks of salt during the year.

"From the above it will be seen, that when home-made salt was plentiful the people had never been in the habit of giving salt regularly to their cattle, and then only a percentage of them got salt; the bulk of the cattle never get salt, but when they got sick, a few doses of a chittack or so, by way of medicine, were given them. As in the case of the men, so in regard to their cattle, no difficulties are experienced in procuring as much salt as is needed."

HURDUI. *Mr. C. Foster, Officiating Deputy Inspector:*—"I am of opinion that the consumption of salt in Hurdui is not different to what it is in Pertabgurh or Fyzabad. The enquiries conducted by the Assistant Commissioner amongst all classes, gave me an opportunity of taking notes to guide me; and the average consumption per head that was then worked out was something over 4½ seers (very young children were excluded), and this is as close as possible the quantity consumed by my servants."

BARAITCH. *Mr. W. T. Lyon, Deputy Inspector:*—"From personal enquiries, I find that the yearly expenditure of salt by any one person in no case exceeds 4½ seers, or 1 tola per diem.

Berar Section.
MULKAPORE. *Mr. A. Bradford, Patrol:*—"After searching enquiries into the consumption of salt per head of the neighbouring population, both above and below Line, the information that I have been able to glean is as follows *viz.*, that the quantity consumed at an average per annum is about 9·12 lbs., or 1 tola per diem. This supply seems to be adequate to their own personal wants, as no complaints were made to me about its being insufficient. Salt, as a rule, is not given to cattle in these parts, except when they are sick, nor is the appearance and strength of the cattle in any way affected by their not receiving it."

CHIKLEE.

Sub-Assistant Patrol in Charge:—"In the 50 villages situated above Line in this Section, there are 6,393 men, 5,202 women, and 2,670 children—in all 14,265 souls—who consume annually 2,604 maunds 30 seers of salt; adults 18 seers, and children 4 seers 8 chittacks each per annum, as salt is used more in this than in other countries.

"There are 14,473 head of cattle in the villages above this beat, which get salt twice a year, in quantities of about half a seer each time, amounting in the year to 180 maunds 36 seers 8 chittacks.

"The population of the fifty villages below Line amounts to—adults 22,972, and children 6,297—total 29,269 souls, who eat the same quantity of salt as residents of villages above Line.

"The total quantity of salt consumed in this beat amounts to 8,850 maunds 1 seer 12 chittacks. Shortness of supply is not complained of, and it is therefore imagined that the men consume salt to the full extent of their wants; but the residents of villages below Line give only 4 chittacks of salt to their cattle, which may argue against the above supposition. Cattle which get salt are in every way superior to those which get none."

SINDKHERI.

Mr. R. Rose, Assistant Patrol:—"The consumption of salt per head is very great, and the amount consumed by each adult male and female is about 6 or 7 seers per annum, and the amount consumed by a child is in proportion to its age.

"Since the Line has been laid down, the people complain of the dearness of salt compared to what is was before (*i. e.*, some 15 or 16 seers per rupee); however, they do not stint themselves, but eat the same quantity as before: this is both above and below Line. With regard to cattle, both above and below Line, it has always been the custom, so far as I can learn, to give cattle salt but once in the year, *viz.*, at the 'Pola' festival, and then they give them about a couple of handfuls, which equals about 2 chittacks.

"Sometimes when cattle are ill, salt is given them; but not otherwise, as the people do not seem to think it necessary."

RISSONDH.

Mr. W. Clarke, Assistant Patrol:—"The consumption of salt, both above and below Line is the same, *i. e.*, about 6 seers per head per annum, male or female; a child consumes in proportion to his age. The people do complain of dearness of salt since the laying down of the Line, in comparison to what it ruled at before; but still they do not stint themselves, and consume the same quantity as before. With reference to cattle, it is not the practice in Berar to give them salt always; only at a certain time of the season, at a festival called 'Pola,' all cattle get salt to the amount of about 2 chittacks each. Though cattle do not get salt regularly in Berar, yet they do not look the worse for it, for they keep in very good condition.

PHALAGAON.

Mr. J. G. M. Glen, Patrol:—"From very careful and minute enquiry made and caused to be made, I have ascertained that each adult consumes on an average 12 seers per annum, female 10 seers, and a child 4 to 5 seers.

"It is generally believed that quantity is amply sufficient and adequate to all their personal wants, and also enough to maintain them in good health.

"I have not been able to notice any perceptible difference of the amount consumed above and below Line; neither in the health of the population above and below Line.

"The inhabitants of this and the surrounding country *do not* give their cattle salt, although they do so on any notable days. But I have particularly noticed when salt is daily given by the community, those cattle are so much better and also stronger and well-favoured, those cattle being easily discovered to the eye, and the people themselves acknowledge the benefit resulting from giving salt."

POOSUD.

Sufdur Ally, Assistant Patrol:—"This paragraph embodies the result of enquiries made by me of different puttails, zemindars, and others, *viz.*, that each individual

consumes 15 seers of salt, per annum; which used to cost before the laying down of the Line Re. 1-4-0, but now costs Rs. 2-8-0. Salt is used here with atta, dal, vegetables, and rice; and a woman consumes more salt than a man. If a man uses 1 seer of salt in the month, a woman uses 1 seer 8 chittacks. A minor and an adult consume salt in equal quantities; for a child takes his meals, &c., several times during the day, while a grown up man eats twice only. The quantity now used by the people satisfies their wants. No one complains of shortness of supply; if they do complain, it is of the high price of salt.

"The Koonbees, a cultivating class of this country, never give salt to their cattle. Zemindars sometimes give salt to their draught-bullocks. This practice exists of old; but the Bunjaras, who reside here in large numbers, give salt to their cattle three times during the rains, at the rate of 1 chittack per head. The introduction of Customs' rules has not altered this practice."

SAWURGAON. *Mr. A. W. Emmett, Assistant Patrol:*—"From the enquiries I have made into the consumption of salt, I find that an adult male, with two meals a day, consumes yearly from 5 to 6 seers; an adult female, from 4 to 5 seers; and a child, 2½ to 3 seers. At these rates, the annual consumption of a family, of man, wife, and child, would be 11½ seers, or 23lbs. per annum.

"Again, as to cattle, I find that bullocks engaged in agricultural purposes (those that are constantly and daily worked) receive a handful each, equal to about 1 chittack, once a week; draught-cattle, when not hard worked, about the same quantity once a month; cows and buffaloes at 'Dewalee.' Cattle-holders, in the monsoons and when their cattle are unemployed, give them salt occasionally, say once in every two months.

"I have remarked no difference, taking as a whole, in the appearance of cattle above and below Line.

"The supplies that now reach cattle are in the opinion of proprietors quite sufficient to keep them in health and strength. I am told they never gave their cattle more in former times, and I am assured that neither the people themselves, nor their cattle, have any difficulty in procuring as much salt as they require."

KAEER. *Ahmud-ool-lah Khan, Patrol:*—"I employed various methods for prosecuting my enquiry, questioning people both with and without families, and arrived at the conclusion that 6 seers per annum for an adult, and 3 seers for a child under 12 years, was the quantity of salt consumed in this part of the country.

"There is no difference in the quantity used above and below Line. Shortness of supply is not complained of at present, as the weekly markets, frequented by retail traders, supply the wants of the population. The price of salt certainly rises and falls occasionally; but this circumstance does not affect the quantity usually consumed by the people.

"The practice in regard to giving salt to cattle varies in this locality—bullocks employed for lading purposes getting more salt than the others, some of them weekly and bi-weekly during the rainy season; the quantity of salt given, varying also according to the size of the animal, *i. e.*, from 1 to 2 chittacks for each head: no weighment is made, a handful being about the quantity given. Again, cart-bullocks get salt, varying with the means of their owners; some as stated above, others once a month, and others again during the rains from two to four times. The cultivators, also, allow their cattle salt according to their means and the number of cattle they possess; the proprietors of a large flock allowing salt but seldom, and *vice versa*. Others, again, administer salt to their cattle medicinally only, and on two festival occasions during the year, *viz.*, 'Dewalee' and the 'Pola' fair, in Sawun, when every head of cattle gets salt as a rule. Even the poor do not omit this ceremony. Cattle in the habit of getting salt, eat and drink better than the others, and are in consequence stronger and better-looking.

Extract from Mr. Ray's Report on Salt Manufacture in Rewah:—"The cattle of the Rewah Terrai are of a superior class, being of larger build and in remarkably finer condition than those of the neighbouring British lands, while on the other hand, those on the table land of Rewah are poorer than those of our own villages. This is not to be attributed to the cheapness or abundance of salt, but to the mineral qualities in the water, and the rich grazing to be obtained on the hills and along the banks of the many nuddies and nullahs which water the "Terrai." Salt is never given to cattle in this part of the country, nor in any other as far as my experience goes, except when sickness renders it necessary. On the question of administration of salt to cattle, I request permission to give a home experience of my own, practically illustrated under my close observation.

"For three years past, *i. e.*, during 1866-67-68, I employed an Aheer, who supplied me with milk by bringing his cows to the door to milk, morning and evening, keeping them constantly grazing by day, and tied by night in my compound. This man frequently saw salt, which had been brought in in seizures, destroyed, and, for the mere asking, could have at any time obtained a handful; it was never asked for. During last rains, a child of mine, which was being brought up by hand, and for which a cow was especially employed, got seriously ill, in consequence of the cow's milk having been affected by the new grass; and, by the advice of the medical attendant, I had the cow tied up and fed exclusively on dry fodder, *i. e.*, bhoosa, gram, cotton-seed, and oil-cake—what the cowherd asked for and recommended as good for the cow and likely to improve her milk. It is strange he never asked for salt, and when reminded of the omission by myself, refused it, saying he never gave it, and his cows did not need it. I have now cows and goats of my own, which are not sent out to graze, but I never give them salt with their food, and the cattle are none the worse for it, nor is the milk less wholesome."

APPENDIX B.

Memo. by Mr. Baness, Late Patrol of Saugor.

BUNJARA CLANS AND CASTES ENGAGED IN THE SALT TRADE OF CENTRAL INDIA.

The Govar-Googourias have twelve clanships of one caste, who eat with one another and intermarry. They are of a peaceable disposition, never having any arms but a bamboo for self-defence.

1 Perbhawuth, 2 Ghinjhawuth, 3 Sindbad, 4 Sadh, 5 Baoonah, 6 Bhikawuth, 7 Bunwariah, 8 Nabawut, 9 Pailiah, 10 Lumbawuth, 11 Bainhs, 12 Sikheea.

Their home is in the tract called Haraoti in Kota Boondi, at a village called Googour Chupprah; "but it is now 20 generations, say about 700 years since we became Bunjaras" ("Bunjara," from the pure Hindee *bunj*,* trade, and *ara*, an affix signifying one who; like *ar* in *loh*, iron, and *ar*, maker or dealer, *sona-ar*, &c., &c. Their place of annual resort in the rains, is about Haraoti in Kota Boondi.

Marriages take place early, the girls' or boys' ages ranging from 10 to 15 years, where means permit, it being incumbent according to the Hindoo law to marry at the age of puberty, generally considered at 12 years in girls; not marrying the girl then being considered equivalent to the slaughter of a cow.

Where circumstances prevent an early marriage, no limit to age is fixed; but a girl of 10 once married is deemed a widow should her husband die.

THE BAMUNIA BHAT BUNJARAS.

This tribe has its home in Ranajee's Raj, *i. e.*, at Chitorgurh in Odeypoorah, in the tract called Mehwar.

They bring their traffic chiefly into Bhopal and Indore, but sometimes into tracts occupied by the Googourias, while these latter dare not attempt reprisal without the certainty of being murdered or ignominiously expelled.

1 Rathore, 2 Gour, 3 Girassia, 4 Daimah, 5 Chaoneah, 6 Chouhan, 7 Ghinjher, 8 Kheechee, 9 Bainhs, 10 Bunwaria, 11 Ogulia, 12 Kutchivaha, 13 Bagara.

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* Derived from the Sanscrit *bunij*, a merchant.

The Bunjaras referred to by Mr. Baness are those belonging to Central India and Rajpootana, and differ, according to Sir Henry Elliot, from those inhabiting Northern India.

The Hindoo Genealogical Records usually consider Bunjaras to be "charuns," or bards who have chosen a wandering life, and disregarded the literary accomplishments which are considered to be their birthright; their origin, however, as the text says, is involved in great obscurity.

The original stock of those living in Northern India, have become much intermixed with other classes, and men of all tribes are constantly deserting their homes and joining the Bunjara fraternity.

The Bunjaras are divided into five tribes, *viz.*, 1st, Toorkea, which has 36 gotes or sub-divisions, and came originally from Mooltan; 2nd Beyd, with 11 gotes, who inhabit the country about Pilibheet, &c.; 3rd, Lubana, with 11 gotes; 4th, Mookeree, with 16 gotes—this tribe asserts that they derive their name from Mecca; 5th, Buhroop, with five sub-divisions, each of these being again broken up into gotes or clans, numbering in all 314.

"During the early part of the cold weather, many parties of them visit the northern and eastern forests to graze their cattle, and dispose of their cargoes of salt; and on their departure in the hot season, load them with rice, turmeric, and other produce of those regions; and as they are distinguished for the honesty of their mercantile transactions, their credit is considerable. They usually take advances from a Native merchant to purchase the goods they require, and repay him by a bill from the market where they are disposed of. Each community has a chief, or *naik*, whom all implicitly obey, and trust in all matters connected with their traffic and conduct. Through him the city merchants make their bargains, for the punctual execution of which he is security. Any Bunjara committing an offence against the tribe, or its head, in his public capacity, is tried by *Punchayet*, and punished by fine or expulsion, as may be thought proper. Their decisions, indeed, are said sometimes to extend to the length of inflicting capital punishment, and such may possibly have, till within the last few years, been the case; for the regions they visit are so remote, that they are pretty secure of escaping detections."

These Bamunia Bhats are a warlike and treacherous race, often committing dacoitee with murder; and always go armed with shield, gun, sword, or spear.

Each Naik of a herd having under him different members of clans, has his distinct flag, and war-drums on camels. On striking their tents, the drums are beat, and all the herds are driven up in regular order of march. Of all these classes, the Rathore and Daimah are the most powerful, and when they enter a foreign State, their chiefs boldly demand "siropah" (*sir-o-pah*) and a cloth of honour, or "khillut"; and it is certainly deemed good policy to humour these Bunjaras, for the more they come, the greater the addition to the revenue.

In 1864, a feud occurred between two clans. A quarrel arose between the Rathores and Daimahs, when the former, after killing and wounding on either side, succeeded in driving off the Daimahs, and seized and confiscated all their salt, cattle, &c. After watching their opportunity for three years, the Daimahs attacked and defeated the Rathores, killed the son of the Naik, and took all their property by way of reprisal.

Since then the feud has become fixed; and the Governor of the Putchboodra tract, to prevent bloodshed, forces one clan to load and depart by a fixed route, to prevent collision. Sometime after, the other clan is permitted to load, and retire by another fixed route.

On coming into British territory, they leave their arms, &c., in a place of security in some Native State.

The Bamunia Bhats, though allowed to eat, smoke, and drink with the Googourias, cannot intermarry. The Rathores also permit a widow to "baitho" in another's house; that is, she is taken as a concubine by another man, and suffers no disgrace.

They also differ from the Googourias in this, that being wealthier they can afford to bring salt on home capital and cattle, and to barter salt for grain, taking a regular agreement between themselves, and, as they delight to say, "*their assamies.*"

In other respects, the Bamunia Bhats differ little from the Govar-Googourias, and all these twenty-five clans worship at the same shrine of Rama Pîr, in the centre of the warehouse compound.

The money invested annually in the salt trade (6,00,000 gonds = 21,00,000 maunds) is little less than 25 to 30 lakhs of rupees; and with few exceptions, all the Goars and Googourias are the debtors of the Marwari bankers of Pali-Putchboodra.

When salt-laden cattle leave foreign, to enter into British, territory, and come to Saugor, they cross the frontier on passing the Betwa or Betwunti. They cross by three well-known ghâts; one Bora Ghât, about 20 miles from Khorrai; the second, Boathi Ghât, about 16 miles from Khorrai; and the third, Piprah Ghât, 14 miles from Khorrai.

The moment they cross the Betwa, they enter British territory in Tehseel Khorrai, over all of the pergunnahs of which they scatter themselves; about the neighbourhood of the villages of Hinnond, Agachouth, Etawa, Bulda, Rampoor, and Khorrai. Here they remain from one to three months, the delay arising from the fact that the sale of salt is regulated by fixed Bunjara laws, which none dare transgress. Whoever first fills his gonds at Putchboodra or Sambhur, has the right of priority of sale; the second next gets the preference, and so on; any infringement, leading to instant war and bloodshed among the clans.

One despatch, now lying in the District of Khorrai, is still undisposed of, the owner not daring to break through a rule sanctioned by usage from time immemorial, and now held almost sacred.

From Khorrai Pergunnah, according to the requirements of trade, a Bunjara trader visits a mart, Rahutgurh or Khorrai, with about two chittacks of salt as a speci-

men, makes his terms with any would-be purchaser, accepts a "baiana" (ernest-money) takes a "sutta," or written terms of agreement, goes back, brings his laden herd, makes over the salt, and returns with the cash and his cattle, with a return freight of gum, ahl, nurrel, &c., but chiefly grain; that is, when the Bunjaras stock of salt is a speculation with his own money.

But when, as it often happens, the Bunjara is in the clutches of some Native usurer or banker, with whose money he ventures, he comes direct to his creditor, and stocking his godown, at once retires; the sales being conducted by the creditor, and the profits accruing being carried towards liquidation of account. But here, too, the same precedence obtains of the first filler at the "surrs" having the prior right of sale; the right being waived only when the Bunjara who fills, and arrives first himself, says he will not at that time sell his goods, or when he fails to sell within a reasonable time.

ROUTES TO SAUGOR.

Should the fields be cut, Bunjaras take the straight road to Saugor, *via.*, Chilodah, Bunt, Moonderah, Tora-Pali, Kishenpoora Ghât on the Dhussan river, Neriaoli, Jerarah, Hupsuli, Amaoni, and Thakoor-Baba, to the Mundi; should the fields be uncut, they take Barodia, Manikchouk, Jalundhur, cross the Dhussan at Piprah Ghât, then to Jerarah, Hupsuli, Amaoni, and Thakoor-Baba to Saugor. Another road, when the fields are uncut, is by Agachouth, Bussari, Khimlasa, Patheria, Dhanaora, Giraola, Bunt, Moonderah, &c., to Saugor. All these on leaving Tehseel Khorrai.

From Khorrai to Julla, Barodia, and Rahutgurh, to Jeysinuggur.

From Rahutgur *via* Bairkheri, Sehora Ghât on Dhussan river, and Bhopal, to Saugor.

Along all these routes salt comes into the Saugor Division, and Bunjaras alone are the importers.

APPENDIX C.

Report on the Dobra Salt Manufacture at Ramsur, by Captain H. M. Repton, Officiating Deputy Commissioner, Ajmere.

Query.	Answer.
A.—Where is Ramsur? giving its distance and direction correctly from some three or four well-known places.	*Vide* Sketch Map accompanying :—

	Distances.
Kishungurh, north	20 miles.
Ajmere, north-west	22 ,,
Nusseerabad, west	8 ,,
Kekree, south-east	28 ,,

B.—Describe briefly the process of manufacture.

The land about Ramsur is subject to saline exudations in common with that about Bhinaie and near Nyanuggur.

In the rains, the alkali collects and is swept into a pit; water is then poured on it from a well, the sand and earth settles at the bottom, when the salt and water is drawn off into another receiver, or shallow pit, where it remains three or four months; the hot wind causes the water to evaporate, and the salt is left adhering to the bottom and sides of the receiver.

C.—What is the annual average outturn in Government maunds of 3,200 tolas?

Dependent on the rain fall. For five years past (1863 to 1867), the average on which duty was paid to Government was for :—

	Maunds.
Ramsur, ...	23,773½
Bhinaie, ...	10,754
Nyanuggur, ...	3,970¾

The maund is the Government one. The manufacture is carried on at isolated places also in the district, but not to any great extent; and in Mairwarrah not further south than Jowaja, except at two places in Todgurh Pergunnah.

D.—How many leading qualities are there (send specimens of each), and what during the past year have the prices of each been at the works?

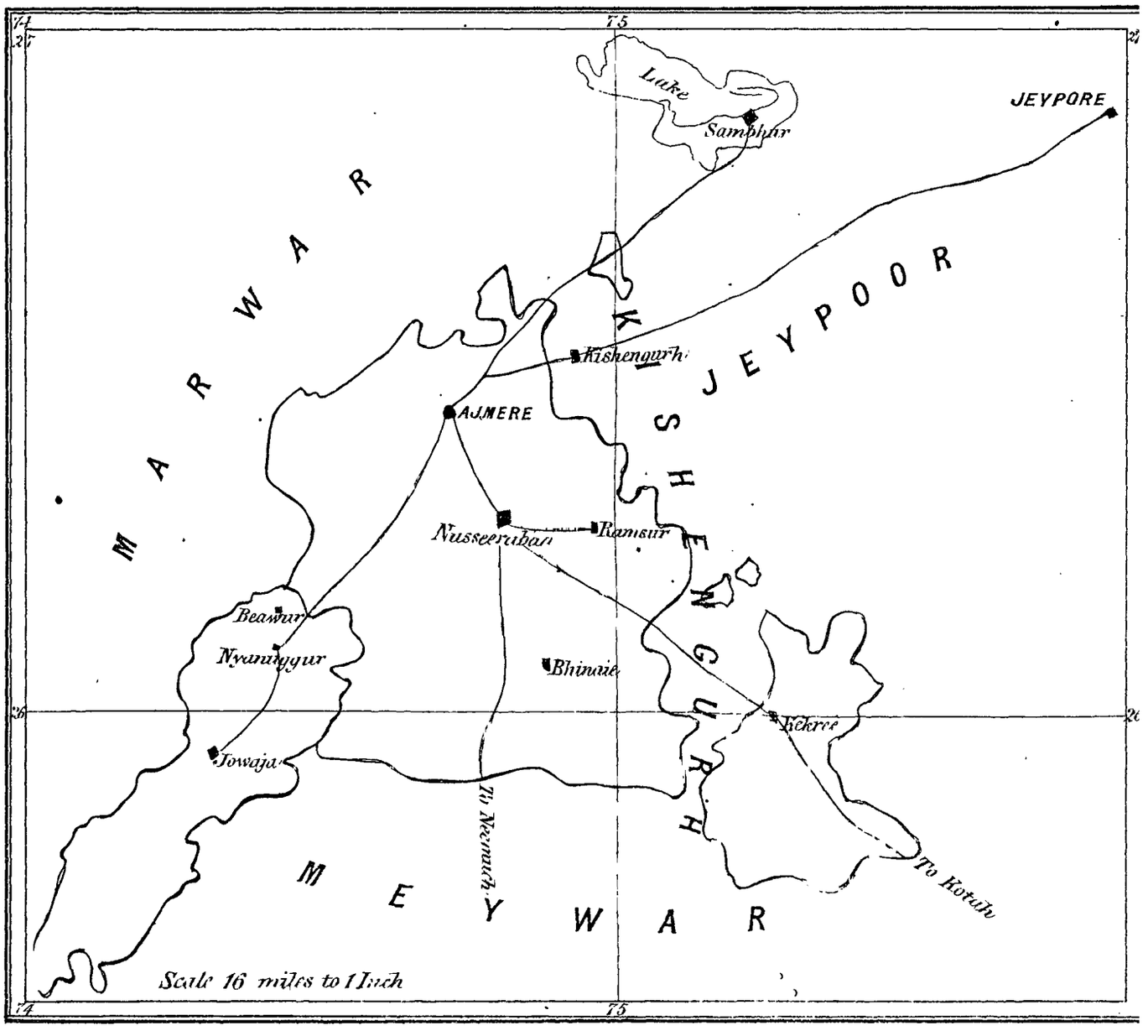
Five qualities (specimens of which were forwarded to your office at Agra per banghy post); all salt prepared as before stated, the quality of the same being dependent on the soil and efflorescence. The prices during 1867 of the salt at the works were :—

1st	Quality	1½	maund per rupee,	Customs Duty 1 anna per maund.
2nd	,,	2	,,	
3rd	,,	2½	,,	
4th	,,	3	,,	
5th	,,	3½	,,	

E.—What States, Provinces, or Territories are supplied by this salt; what are the furthest limits to which it is known to extend; and by what forms of Carriage, Rail-road, Boat, Bunjara Bullocks, does it mostly travel?

Harowtee, Malwa, Saugor, and Nerbudda territories. Saugor, the furthest known place. Bunjara Bullocks are the mode of conveyance in use.

Query.	Answer.
F.—Are the works now doing as much as they ever did, or have they fallen off; if the latter, why?	The manufacture has fallen off in consequence of the sale of this salt being forbidden during the months of Asoj and Katick (September and October), and a prohibition having been put on any increase to the number of manufactories, as it tends to destroy the land for cultivation. No trace of the above order can be found, but it is still acted on, and appears to have been given in order to make the Bunjaras go for salt to Sambhur, and pay the higher duty to the Customs. There are 40 pits at Ramsur, but only 12 at work.
G.—Are the works susceptible of much further development, and, if so, to what extent?	They are probably susceptible of re-development to their original condition and numbers, but this cannot be ascertained as yet. If means of carriage were available, and restrictions taken off, there is every probability of the manufacture reviving.



APPENDIX D.

Deliveries of Liverpool Salt at Calcutta.

	1862-63.		1863-64.		1864-65.		1865-66.		1866-67.		1867-68		1868-69.	
	Range of prices.		Range of prices.		Range of prices.		Range of prices.		Range of prices.		Range of prices.		Range of prices.	
	Rs.	In Mds.	Rs.	In Mds.	Rs.	In Mds.	Rs.	In Mds.	Rs.	In Mds.	Rs.	In Mds.	Rs.	In Mds.
April, ...	61—69	1,01,280	62—63	4,28,900	49—50	2,10,411	35—48	4,96,282	104—115	1,76,815	106—122	1,91,138	106—111	2,22,393
May, ...	50—58	3,01,478	62—65	2,63,464	46—50	4,08,761	34—39	4,29,276	125—128	2,22,827	117—123	3,36,930	95—109	3,27,713
June, ...	68—87	3,40,637	57—68	4,60,476	57—60	4,97,374	46—85	4,84,823	122—125	2,72,453	119—126	3,76,327	83—103	3,60,689
Total, ...	50—87	7,43,395	57—68	11,52,840	46—60	11,16,546	34—85	14,10,381	104—128	6,72,095	106—126	9,04,895	83—111	9,10,795
July, ...	74—81	4,54,778	55—62	5,45,196	55—58	6,18,243	80—85	3,64,304	110—122	4,81,235	117—124	5,81,939	80—100	7,07,146
August, ...	74—81	4,98,182	56—60	4,12,831	39—49	6,37,035	70—83	2,95,935	114—122	5,42,621	106—117	5,36,019	92—102	6,33,966
September, ...	78—83	3,51,428	58—61	3,94,199	37—40	6,13,852	77—92	2,22,417	111—130	4,02,982	89—106	5,10,940	95—102	3,94,274
Total, ...	74—83	13,04,388	55—62	13,52,226	37—58	18,69,130	70—92	8,82,656	110—130	14,26,838	89—124	16,28,898	80—102	17,35,386
October, ...	77—80	1,96,121	51—60	3,91,246	40—52	3,04,356	77—93	3,94,464	118—129	2,44,235	96—106	3,22,748	83—95	5,87,956
November, ...	74—77	3,41,853	51—55	3,65,635	35—58	4,11,392	60—87	4,10,268	112—125	2,90,464	87—100	3,54,612	82—91	5,08,619
December, ...	62—71	2,61,734	37—43	3,00,761	41—44	3,77,285	56—67	3,41,156	98—111	2,78,978	89—100	3,61,606	72—82	4,17,008
Total, ...	62—80	7,99,708	37—60	10,57,642	40—58	10,93,033	56—93	11,45,888	98—129	8,13,677	87—106	10,38,966	72—95	15,13,583
January, ...	54—60	4,82,276	43—52	2,85,193	42—49	4,00,418	76—80	4,68,868	97—113	3,04,721	89—104	4,59,795	73—86	4,28,041
February, ...	57—61	3,91,348	50—62	3,23,741	41—43	4,57,663	76—84	4,36,261	100—113	3,67,277	100—111	5,10,019	76—82	3,71,931
March, ...	56—70	3,62,876	49—50	3,37,682	41—48	6,58,650	86—95	3,74,610	106—114	3,13,922	110—114	3,94,010	77—81	3,89,360
Total, ...	54—70	12,36,500	43—62	9,46,616	41—49	15,16,731	76—95	12,79,739	97—114	9,85,920	89—114	13,63,824	73—83	11,89,332
GRAND TOTAL, ...	50—87	40,83,991	37—68	45,09,324	37—60	55,95,440	34—95	47,18,664	97—130	38,98,530	87—126	49,36,583	72—111	53,49,096

APPENDIX E.

CIRCULAR No. 87.

FROM

A. O. HUME, ESQ., C.B.,

Commissioner of Inland Customs,

TO

THE DEPUTY COMMISSIONER AND ALL COLLECTORS OF CUSTOMS.

DATED AGRA, THE 19TH JUNE, 1869.

IN reading through the Annual Reports, and in reviewing the expenditure of the past year, from Imperial as well as Departmental Funds, the Commissioner has been much impressed with the conviction that Collectors, and other Local Departmental Heads, are by no means sufficiently alive to the absolute necessity of economy.

2. It appears to the Commissioner that the idea of many officers is, not "How much can we possibly save to the State?" but "How much can we possibly get passed?"—not "What can we possibly do without?" but "What can we possibly want?"

3. It is necessary emphatically to warn all officers that for the future they must act on a different system, and must, like faithful servants, watch the expenditure of every ANNA more closely than if the money to be spent was their own property, adopting it as a standing rule, that *nothing is to be expended, whether passed in the Budget or not, the expenditure of which can possibly be avoided.*

4. Officers will understand that a close check over expenditure and a rigid economy is absolutely essential, and that in future, in recommending officers for promotion to higher grades, great stress will be laid on the manner in which these present instructions have been attended to. A Collector on Rs. 600 a month, who does not co-operate zealously with the Commissioner in his attempts to reduce the heavy charge the Department now is to the State, will not have the preference when a 700-rupee Collectorship falls vacant, but will, *cæteris paribus*, be liable to supersession by a 500-rupee Collector who distinguishes himself by strict economy and *judicious* reductions.

5. One of the first matters in which economy must be practised is in Public Works. Much expenditure, it is believed, is incurred that might without any injury to the public service be avoided.

6. First, there are the men's huts. As a general rule, these should be repaired, and where necessary reconstructed, by the men themselves. Small mud-walled buildings, with flat mud roofs, for which, usually, sufficient branches are available from the hedge and hedge-trees, answer perfectly all purposes, both as regards the health and comfort of the men. They should not be whitewashed, but neatly "*leeplessed*" (just as the people do where their own houses are concerned) once or twice a year. They will not *look* so well, but they will answer all practical purposes *quite* as well, and we cannot afford to pay for *looks*.

7. Collectors will therefore understand that, notwithstanding its inclusion in the Budget, *no* money is to be spent on the men's huts this year, without special reference to and sanction from this Office. There may be particular localities, where the absence of hedge-wood, or other special circumstances, may render a small grant necessary, but such special circumstances must be reported on to this Office, and sanction obtained. That Collector, however, who, while maintaining his chowkees in comfortable, habitable order, neat and clean, does so with the least expenditure of Government money, will deserve special commendation, and such Line officers as most heartily co-operate with their Collectors, will be considered to establish claims to promotion.

8. The system is a new one, and will require tact, good humour, and perseverance on the part of those concerned to introduce it; but those who fail to carry out this desirable reform, or carry it out with so little tact as to create any permanent feeling of dissatisfaction amongst the men of their beats as a body, will necessarily greatly weaken their claims to promotion.

9. One thing should be clearly understood: the charges of the Department have now reached to such a figure, that unless we can effect reductions ourselves, the matter will end in the Government reducing the pay alike of officers and men, unless the Commissioner is in a position to prove that the most rigid economy has been practised, and that the expenditure of every anna has been anxiously scrutinized.

10. To return: We have next expenditure on officers' dwellings, orderly ranges, weighing-sheds, &c. Some repairs are essential to these, for the preservation of Government buildings, and for the health and comfort of our officers; but it is not believed that the amounts sanctioned, and yearly spent, are *absolutely* necessary. It is believed that if the houses belonged to the officers themselves, and the money had to come out of their own pockets, fully one-third would be saved, and this it is now expected will be done. Collectors must not only see that no work not absolutely requisite is undertaken, but that everything is done for the least money possible. Out of the Budget-grant for the present year, nothing is to be spent without sanction. Collectors are at once to consider what repairs are absolutely necessary, and carefully estimate these, and obtain sanction for the necessary expenditure from this Office *before making any outlay*. In really emergent cases this rule may be disregarded, but a special report must, in all such cases, be at once submitted.

11. In future, officers are not to propose stone floors for weighing-houses, &c., &c., *unless* what they solicit sanction for is *absolutely* necessary. Wells on puraos and the like, so far as they can be legitimately constructed from Departmental Funds (which latter should be utilized to the *fullest extent*), may be proposed as usual. Anything that tends to the convenience of the trader, that facilitates the clearance of his goods, and the like, may be fairly provided for from the appropriate Departmental Funds to the fullest extent that these will permit; but from Imperial Funds *nothing* must be spent that can possibly be saved. The question is not to be, is it nice? would it be convenient? would it improve the look of the thing? but simply, is it *absolutely* necessary? is it impossible to do without it, without a more than counterbalancing injury to Government property or Government revenue? And here it is remarked that officers should, one and all, habituate themselves to weigh the cost and gain of every work or measure. It is not worth while to spend Rs. 10 if you are only to gain Rs. 9 by the expenditure. For instance, quarter-mile posts in some divisions would diminish the amount of smuggling, *but* to establish these would cost perhaps 200 times as much as the additional preventative thereby afforded against smuggling would ever enable us to gain.

12. And this leads to another most important question, which all officers must now carefully consider; and that is, how far present establishments are susceptible of numerical reduction. Let each Collector *patiently* and thoughtfully scrutinize his list of establishment, and bearing in mind the following points, submit, by the 1st of January, a report as to the possible reductions in his division. Let him remember that on our being able to bring our expenditure within a lower percentage on our realizations than it now stands at, will, sooner or later, depend the prospects of the service as a whole. We *must* make some reductions ourselves, or we shall have wholesale ones *forced* on us by higher authorities, which will probably cripple our efficiency.

13. In regard to establishment, the following are some of the points to be considered:—

I.—What officers' beats in my division (if any) can be amalgamated?

II.—What beats are such that Native Sub-Assistant Patrols, on Rs. 60 or Rs. 70, might fairly be put in charge of them, subject to the supervision of the officer of one or other of the adjoining beats?

III.—Is every Sub-Assistant Patrol now stationed in this division absolutely required? Can I not get the work very well done with one, two, or three fewer officers of this grade?

IV.—Can I not do with fewer jemadars? It is believed that one jemadar to every three chowkees, where these are from a mile to two miles apart, and one to every five chowkees, where they are about half-a-mile apart, is sufficient; and Collectors not prepared to make reductions to this extent, must distinctly show that these will produce serious injury.

V.—Are there not beats in which the number of chowkees may be reduced? Every chowkee reduced is Rs. 300 per annum saved? Grant that a *little* extra smuggling takes place at first; there are many places, it is believed, where the loss thus occasioned would be in no way commensurable with the saving effected, and it is believed that, especially in divisions where the posts are half-a-mile apart, there are several places where mile posts would answer all practical purposes.

VI.—In my own office and orderly establishment, and sudder gusht, what reductions can I effect: what peons or writers can be dispensed with? In the first place, there seems no doubt that the Treasury establishments of Muttra, Agra, and Jhansie can be dispensed with. Smuggling having, as the Collectors' reports show, almost entirely ceased in the more important divisions of the Line, it is difficult to see what is wanted with the sudder gusht. At Delhi, there is some internal establishment, believed to do nothing and to be perfectly useless; the Collector if he wishes to retain it, should be in a position to prove that it is needed.

VII.—Are there not many posts at which the trade is so insignificant that the retention of a mohurrir is needless, and where the officer of the beat, being furnished with lithographed forms, might be required to record himself all that has to be writen, with the occasional assistance of his kotegusht, who, in such beats, might be required to be a man able to read and write well?

14. These, and similar questions which will readily suggest themselves to such experienced officers as they are, must be carefully considered by every Collector, &c. Reductions of establishment *must* be made; it is for the divisional and provincial heads to decide in which way they can be effected with least injury to the practical efficiency of the Department. Let them bear distinctly in mind that their own prospects, and those of their brother officers, may depend no little on the success with which they deal with this difficult and delicate matter; and accepting, once and for all, as a fact, that some reductions must be made, decide judiciously and wisely how these can best be effected.

15. Then we come to travelling allowances. Some Collectors have been very extravagant in this matter. One, I regret to say, actually sent up a bill showing that his whole object was to get as much money out of Government as possible: when he marched less than 10 miles in a day, he charged Rs. 5 a day, and when he marched more than 10 miles, he charged at 8 annas a mile "for *rapid* travelling." This of course could not be allowed; but that such a thing should be attempted, shows that not every officer (as I had hoped was the case) is actuated by a loyal and proper spirit in charging his travelling expenses.

16. In future, Collectors, without special leave, will not be allowed travelling allowance for more than traversing their whole divisions twice in the year. Usually they

should make their first trip in November, and the second in March, taking care to return to head quarters a week before the year closes.* On first starting, on each occasion they will march to the Northern or Western extremity of the division, and going up, they will be allowed at the rate of two days for each beat; on their return, they will be allowed at the rate of one day for each beat. They will then proceed to the Southern and Eastern end of their division, being allowed as before two days for each beat going up, and one day for each beat returning. Sundays, of course, will not be reckoned. Where posts are more than twelve miles, but not more than twenty apart, an extra day will be allowed in returning; and where they are more than twenty and less than thirty, one extra day in going and two in returning will be allowed; and one *more* extra day will be allowed, both in going and returning, for every ten miles above thirty. In Nagpore, the Collector will not be expected to traverse each of his Lines more than once, and he should march out by one Line and return by the other. In Raipoor, the Collector will not be expected to proceed beyond the Dhumturee post more than once in the year. No Collector will draw travelling allowance or carriage-hire except from the day on which he actually *starts* and *marches*.

17. It is to be understood that the above defines the maximum marching period for which a Collector will be allowed to draw travelling allowance; but Collectors are *expected*, whenever the due and complete discharge of the various duties they have to perform on tour will permit the same, to get through their marching in less than the maximum period, and thus reduce, as far as is consistent with the attainment of all those objects which their tours are designed to secure, their charges for travelling allowance.

18. In contingent expenses, again, reductions are unquestionably practicable, provided every officer steadily sets his face against incurring the smallest expenditure for any not *absolutely* necessary purpose. The most rigid economy, it is again repeated, will be insisted on, and Collectors and others, who have the disbursement of public funds, will be held personally responsible for this.

19. There is another direction in which savings may be made. It often happens when trade is slack, especially in the rains, that when men die, or go on leave, or are dismissed, the immediate appointment of a substitute is unnecessary. Advantage should be taken of such cases to reduce the salary bills as much as possible. Moreover, there are beats in the strongly-manned divisions where the hedge is strong, and smuggling of little account, in which Collectors might safely abstain from filling up vacancies to the extent of 5 or even 10 per cent.

20. Again, when officers go on leave, it is often unnecessary to appoint anyone formally to *officiate* for them; it is quite sufficient to place a Sub-Assistant Patrol in charge, without giving any acting allowances. Whenever this is practicable, it should be done. In this, as in every other matter, every possible saving should be made.

21. It is believed that there are several portions of the Line where, without sacrificing many buildings or any peculiar advantages, the Line might be straightened and shortened, and the strength of the establishment reduced accordingly. In this direction, also, attention must be turned. It is hoped that all officers will realize the vital importance of this question. The Commissioner does not expect impossibilities; he is aware that more can be done in some divisions than others, but he wishes it to be clearly and distinctly understood, that any officer who fails to do his *best* to effect a reduction in the cost of the Department, or who neglects to show that he *has* carefully considered the question, and has really endeavoured to solve the difficulty, will necessarily forfeit his (the Commissioner's) good opinion, and most seriously prejudice his own future prospects.

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* Separate instructions as to some of the more important matters that should be attended to on tour by Collectors will be issued hereafter.

22. Of course no officer likes the idea of reductions, and no one willingly takes such in hand; but here, in one way or another, they must be made. The interests of the State must be paramount, and officers will best consult their *own* interests by cheerfully entering into the spirit of these instructions; and, instead of grumbling at, or seeking to obstruct, a measure which the Head of their Department, in their interest as well as that of the State, finds himself compelled to insist on, set to work energetically and intelligently to bring it to a successful issue.

ALLAN HUME,

Commissioner of Inland Customs.

P. S.—It is observed that in some divisions expenditure has been greatly swelled by money being drawn for works and salaries, and subsequently recredited to Government. This practice is highly objectionable; *only* what is required for actual disbursement is to be drawn. Salaries of men on leave and of vacant appointments are not to be *drawn*; money for works, similarly, is only to be drawn as required for *disbursement*. In a word, nothing is to be *drawn*, sanctioned or otherwise, until it is actually *required* for *payment*. This will *greatly* reduce the amount now yearly recredited to Government, which, in one division, for instance, exceeds Rs. 10,000. How seriously this matter affects our position in the eyes of superior authorities, will be apparent on a little consideration. Say that our *bonâ fide* gross income is 120 lakhs, and our *bonâ fide* expenditure 14 lakhs, our charges will then stand at 11·66 per cent.; but say, that by erroneous drawings of money *not* really wanted, we swell our charges to 15 lakhs, and recrediting 1 lakh, raise our gross revenue to 121 lakhs, our charges will now stand at 12·39—a most serious difference to us, whose value as a Department for realizing revenue will be principally gauged by the percentage which our cost of maintenance bears to the revenue we realize.

Collectors must, therefore, be very careful *not to draw one single rupee* that they do not then and there require to *spend*; supplementary bills can always be drawn, but money once drawn, however soon it is recredited, stands for ever as a *charge* against the Department, and goes to swell the percentage our cost bears to our realizations, and to help to make us appear a greater expense to the State than we really are.

ALLAN HUME.

Statement showing for 1868-69, the cost per pound in the Districts of the Punjab, Nor

Districts in which the Salt consumed averaged one-half penny or less per pound.				Districts in which the Salt cousumed averaged above one-half penny, but did not exceed three farthings per pound.				Districts in which the Salt consumed averaged above three farthings, but did not exceed one penny per pound.				Districts in whic but did no
District.	Population.	Province.	Description of Salt consumed.	District.	Population.	Province.	Description of Salt consumed.	District.	Population.	Province.	Description of Salt consumed.	District.
Kangra, ...	7,27,148	Punjab, ...	Mundi.	Hoshyarpore,	9,38,890	Punjab, ...	Mundi.	Mozuffergurh,	2,95,547	Punjab, ...	Lahoree.	Montgomery,
				Simla, ...	33,995	Ditto, ...	Ditto.	Jhung, ...	3,48,027	Ditto, ...	Ditto.	Lahore, ...
								Mooltan, ...	4,71,509	Ditto, ...	Ditto.	Goojranwala,
								Shahpore, ...	3,68,796	Ditto, ...	Ditto.	Ferozepore,
								Goojerat, ...	6,16,347	Ditto, ...	Ditto.	Goordaspore,
								Jhelum, ...	5,00,988	Ditto, ...	Ditto.	Jullundur,...
								Rawul Pindee,	7,11,256	Ditto, ...	Ditto.	Sealkote, ...
								Muttra, ...	8,09,321	N.-W. P., ...	Balumbha, Soolt anpooree, and Noh.	Umritsur, ...
												Loodiana, ...
												Sirsa, ...
												Kurnál, ...
												Goorgaon, ...
												Delhi, ...
												Gurhwal, ...
												Saharunpore,
												Moozuffernug- gur.
												Meerut,
												Boolundshu- hur,
												Allygurh, ...
												Moradabad,...
												Shahjehan- pore.
												Agra, ...
												Etah, ...
												Etawah, ...
												Mynpoorie,...
												Furruckabad,
												Cawnpore, ...
												Nagpore, ...
												Nimar, ...
												Shahabad, ...
												Nuddeea,
												Jessore, ...
												Burdwan, ...
												Hoogly, ...
												Balasore, ...
												Pooree, ...

APPENDIX F.

rth-Western Provinces, Central Provinces, Oudh, and Bengal, of the Salt most commonly consumed by the lower classes of the population.

n the Salt consumed averaged above one penny, t exceed one penny-farthing per pound.			Districts in which the Salt consumed averaged above one penny-farthing, but did not exceed one and a half pence per pound.				Districts in which the Salt consumed averaged above one and a half penny, but did not exceed one penny and three farthings per pound.				Districts in which the Salt consumed averaged above one penny three farthings, but did not exceed two pence per pound.				Districts in which the Salt consumed averaged above two pence, but did not exceed two pence-farthing per pound.			
Population.	Province.	Description of Salt consumed.	District.	Population.	Province.	Description of Salt consumed.	District.	Population.	Province.	Description of Salt consumed.	District.	Population.	Province.	Description of Salt consumed.	District.	Population.	Province.	Description of Salt consumed.
3,59,437	Punjab, ...	Laboree.	Hissar, ...	4,84,681	Punjab, ...	Deedwana and Laboree.	Terrai, ...	91,802	N.-W. Provinces,	Thibet, Noh, & Sooltanpooree.	Kumaon, ...	3,85,790	N.-W. Provinces,	Sooltanpooree and Thibet.	Belaspore, ...	7,80,503	Centl. Provinces,	Bunwar.
7,88,902	Ditto, ...	Ditto.	Rohtuck, ...	5,36,959	Ditto, ...	Sambhur, Laboree, and Deedwana.	Goruckpore,	19,53,816	Ditto, ...	Liverpool, Balumbha, Muscat-Dela.	Jaloun, ...	4,05,604	Ditto, ...	Sambhur.	Darjeeling,...	84,000	Bengal, ...	Pungah and Liverpool.
5,50,576	Ditto, ...	Ditto.									Lullutpore,...	2,48,146	Ditto, ...	Sambhur, Salumbha, Sooltanpooree, and Kanaia.	Western Doo-ars, ...	2,00,000?	Ditto, ...	Pungah.
5,49,253	Ditto, ...	Ditto.	Umballa, ...	10,35,488	Ditto, ...	Laboree.	Benares, ...	7,93,277	Ditto, ...	Balumbha.								
6,55,362	Ditto, ...	Ditto.	Dehra, ...	1,02,831	N.-W. Provinces,	Thibet and Laboree.	Jubbulpore,	6,20,201	Centl. Provinces,	Salumbha and Rewah.	Jhansie, ...	3,57,442	Ditto, ...	Ditto and Puchbuddra.				
7,94,764	Ditto, ...	Mundi (?).	Bijnour, ...	6,90,975	Ditto, ...	Sambhur and Sooltanpooree.					Jounpore, ...	10,15,427	Ditto, ...	Balumbha.				
10,05,004	Ditto, ...	Laboree.	Allahabad, ...	13,93,183	Ditto, ...	Balumbha, Salumbha, and Sooltanpooree.	Sangor, ...	4,98,642	Ditto, ...	Sambhur.	Bustee, ...	14,55,697	Ditto, ...	Liverpool and Balumbha.				
10,83,514	Ditto, ...	Ditto.					Dumoh, ...	2,62,641	Ditto, ...	Sambhur and Salumbha.								
			Bareilly, ...	13,61,334	Ditto, ...	Sooltanpooree & Salumbha.					Azimgurh, ...	13,85,872	Ditto, ...	Balumbha.				
5,83,245	Ditto, ...	Ditto.					Seonee, ...	4,21,650	Ditto, ...	Kokan.	Chanda, ...	96,086	Centl. Provinces,	Kokan.				
2,40,795	Ditto, ...	Laboree, Deedwana, & Phullowdee.	Budaon, ...	8,89,810	Ditto, ...	Noh and Salumbha.	Hoshungabad,	4,40,433	Ditto, ...	Ditto.	Mundla, ...	39,061	Ditto, ...	Sambhur and Kokan.				
			Futtehpore, ..	6,80,786	Ditto, ...	Balumbha and Salumbha.	Nursingpore,	3,36,796	Ditto, ...	Balumbha.	Rungpore, ...	10,04,672	Bengal, ...	Liverpool.				
6,10,927	Ditto, ...	Sooltanpooree.	Banda, ...	7,24,372	Ditto, ...	Ditto.	Raipore, ...	13,22,662	Ditto, ...	Kokan and Madras.	Lukhimpore,	1,01,337	Ditto, ...	Kurkutch.				
6,26,646	Ditto, ...	Ditto.	Humeerpore,	5,20,941	Ditto, ...	Ditto.					Seebsagor, ...	2,19,553	Ditto, ...	Pungah.				
6,08,850	Ditto, ...	Sooltanpooree. Salumbha, and Deedwana.	Mirzapore, ...	10,54,413	Ditto, ...	Balumbha.	Sumbulpore,	8,12,348	Ditto, ...	Bunwar.	Singboom, ...	2,44,245	Ditto, ...	Ditto.				
			Ghazeepore,..	13,42,234	Ditto, ...	Liverpool and Balumbha.	Balaghat, ...	33,978	Ditto, ...	Kokan (?)								
2,48,742	N.-W. P., ...	Noh, Sooltanpooree, and Thibet.	Kheree, ...	5,27,390	Oudh, ...	Balumbha, Salumbha, and Sooltanpooree.	Baitool, ...	50,352	Ditto, ...	Salumbha and Kokan.								
			Lucknow, ...	6,30,259	Ditto, ...	Ditto.	Gyah, ...	13,67,392	Bengal, ...	Liverpool.								
8,66,483	Ditto, ...	Ditto.	Pertabgurh,	7,24,759	Ditto, ...	Balumbha and Salumbha.	Monghyr, ...	7,55,385	Ditto, ...	Kurkutch, Muscat-Dela.								
6,82,312	Ditto, ...	Sooltanpooree.																
			Hurdui, ...	9,09,984	Ditto, ...	Balumbha.	Tirhoot, ...	16,09,640	Ditto, ...	Punjab, Muscat-Dela, and Liverpool.								
11,99,593	Ditto, ...	Ditto.	Oonao, ...	5,91,141	Ditto, ...	Ditto.												
8,00,431	Ditto, ...	Salumbha and Sooltanpooree.	Baraitch, ...	5,70,778	Ditto, ...	Ditto.	Purneah, ...	7,27,562	Ditto, ...	Pungah and Liverpool.								
			Roy Bareilly,	6,76,249	Ditto, ...	Ditto.												
9,25,538	Ditto, ...	Salumbha, Balumbha, and Sooltanpooree.	Sooltanpore,	4,33,016	Ditto, ...	Balumbha and Salumbha.	Dinagepore,	7,71,841	Ditto, ...	Liverpool.								
			Seetapore, ...	7,43,235	Ditto, ...	Ditto.	Mymensingh,	9,47,247	Ditto, ...	Ditto.								
10,95,206	Ditto, ...	Salumbha and Sooltanpooree.	Barabunkee,	7,31,661	Ditto, ...	Balumbha.	Sylhet, ...	10,44,650	Ditto. ...	Ditto.								
			Fyzabad, ...	10,38,195	Ditto, ...	Balumbha, Salumbha, and Sooltanpooree.	Kachar, ...	2,12,013	Ditto, ...	Ditto.								
10,16,844	Ditto, ...	Balumbha, Salumbha, and Sooltanpooree.					Bhulloa, ...	5,44,998	Ditto, ...	Ditto.								
			Gonda, ...	7,50,000	Ditto, ...	Ditto.	Doorung, ...	1,85,456	Ditto, ...	Ditto.								
			Bhundara, ...	6,08,480	Centl. Provinces,	Kokan.	Nowgaon, ...	3,78,675	Ditto, ...	Pungah.								
10,28,544	Ditto, ...	Ditto.	Wurdah, ...	3,43,485	Ditto, ...	Ditto.												
6,14,351	Ditto, ...	Ditto.	Chindwarah,	57,675	Ditto, ...	Ditto.	Huzareebagh,	7,13,656	Ditto, ...	Liverpool.								
6,26,444	Ditto, ...	Balumbha and Salumbha.	Patna, ...	8,45,790	Bengal, ...	Liverpool, Muscat-Dela, Kurkutch, & Pungah	Lohardugga,	7,50,294	Ditto, ...	Ditto and Pungah.								
700,220	Ditto, ...	Balumbha, Salumbha, and Sooltanpooree.	Sarun, ...	12,99,163	Ditto, ...	Liverpool and Pungah.												
			Bhagulpore,..	15,33,196	Ditto, ...	Liverpool.												
9,15,947	Ditto, ...	Ditto.	Bograh, ...	4,70,000	Ditto, ...	Liverpool and Pungah.												
11,88,862	Ditto, ...	Balumbha.	Maldah, ...	2,41,490	Ditto, ...	Kurkutch and Liverpool.												
6,39,341	C. Provinces,...	Kokan.																
			Pubna, ...	3,50,526	Ditto, ...	Liverpool.												
31,471	Ditto, ...	Ditto.	Rajshai, ...	9,16,462	Ditto, ...	Pungah and Liverpool.												
15,83,938	Bengal, ...	Pungah & Kurkutch.	Moorshedabad.	11,00,080	Ditto, ...	Pungah, Kurkutch, and Liverpool.												
6,68,712	Ditto, ...	Kurkutch and Liverpool.																
			Beerbhoom,	6,27,879	Ditto, ...	Kurkutch.												
10,13,856	Ditto, ...	Kurkutch.	Bancoorah,...	4,48,895	Ditto, ...	Pungah and Liverpool.												
18,70,906	Ditto, ...	Ditto.																
			Midnapore, ...	15,88,195	Ditto, ...	Ditto.												
10,23,758	Ditto, ...	Liverpool.	Kuttuck, ...	12,71,865	Ditto, ...	Kurkutch and Muscat-Dela.												
6,51,033	Ditto, ...	Kurkutch.																
			Kamroop, ...	81,411	Ditto, ...	(?)												
5,87,915	Ditto, ...	Ditto.	Nyadoomka,	28,675	Ditto, ...	(?)												
			Manbhoom,...	7,76,920	Ditto, ...	Liverpool, Pungah, and Muscat-Dela.												
			Chumparun,	7,50,000	Ditto, ...	Liverpool.												
			Bakurgunj,...	8,58,535	Ditto, ...	Ditto.												
			Dacca, ...	10,28,328	Ditto, ...	Ditto.												
			Furreedpore,	96,915	Ditto, ...	Ditto.												
			Chitagong,...	8,00,000	Ditto, ...	Liverpool, Pungah, and Kurkutch.												
			Tipperah, ...	10,00,000	Ditto, ...	Liverpool and Pungah.												
			24-Pergunnahs,	14,29,082	Ditto, ...	Liverpool.												

SYNOPSIS.

Rate per pound	Districts and their Population, consuming at each rate.										Total.	
	Number of districts.	Punjab.	Number of districts.	North-Western Provinces.	Number of districts.	Central Provinces.	Number of districts.	Oudh.	Number of districts.	Bengal.	Number of districts.	
Not exceeding ¼d., ...	1	7,27,148	...	...	...	...	...	...	...	...	1	7,27,148
Exceeding ¼d. & not exceeding ½d.,	2	9,72,885	...	...	...	...	...	...	...	...	2	9,72,885
Ditto ½d. ditto 1d.,	7	33,12,470	1	6,00,321	...	...	...	...	...	...	8	41,12,791
Ditto 1d. ditto * 1¼d.,	13	84,97,275	14	119,09,513	2	6,70,812	...	...	7	72,99,118	56	283,76,718
Ditto 1¼d. ditto 1½d.,	3	20,57,128	10	87,80,879	3	10,09,640	12	53,26,647	22	175,44,407	50	377,18,701
Ditto 1½d. ditto 1¾d.,	...	...	3	28,68,895	10	47,99,703	...	...	13	100,16,809	26	176,85,407
Ditto 1¾d. ditto 2d.,	...	...	7	52,53,978	2	1,35,147	...	...	4	24,69,857	13	78,58,982
Ditto 2d. ditto 2¼d.,	...	...	...	...	1	7,80,503	...	...	2	3,84,000	3	10,64,503
Total, ...	26	155,66,906	35	296,13,586	18	73,95,805	12	53,26,647	48	376,14,191	139	985,17,135

ALLAN HUME,
Commissioner, Inland Customs.

APPENDIX G.

Report on the Manufacture of Mysore Salt.

QUESTION.	ANSWER.
1. Is any salt made in the Mysore territory; and if so, at what places?	1. Earth-salt is prepared in many parts of the Province, but principally in the Toomkoor and Chituldroog Districts. The accompanying table gives the names of the villages where salt is manufactured, as well as their distance and direction from the nearest important sources.
2. If any salt is manufactured in the Mysore territory, please state—	2. The process by which earth-salt is manufactured is as follows:—
(*a*) The method of manufacture at the various works.	(*a*) An embankment of common earth is first raised in the shape of a square bastion, in which an excavation is then made for the reception of the earth which contains the salt. When this has been filled with saline soil, a proportionate quantity of water being then poured on the earth, it filtrates through it, dissolving the salts. The solution is then conveyed through a narrow channel into a cistern or reservoir, constructed for this purpose below the embankment, where it is generally allowed to remain for two or three days; during which period, by the action of the sun's rays, the scum accumulates on the surface, and is then gradually removed till the water becomes clear and transparent. It is afterwards conducted into smaller pans or cisterns built with brick in chunam, and is there allowed to remain till the whole of the water evaporates (which occupies about ten days), and leaves a residuum of salt.
(*b*) Mention roughly the gross annual outturn of each work.	(*b*) Each work or pan is capable of yeilding from about five to thirty-five maunds annually.
(*c*) The quality of the salt so produced.	(*c*) But the quality of the salt is very inferior, and unfit for general use, unless it is again purified by solution and evaporation.
(*d*) Its selling-price at the works per Government maund of 40 seers of 80 tolas each; and	(*d*) The price of the salt at the places where it is manufactured has been on an average for the past twelve months Rs. 1-14-0 per Government maund of 40 seers.

QUESTION.	ANSWER.
(*e*) Whether the Mysore Government levies any tax on this home-produced salt or not.	(*e*) No tax is levied on the salt; but the salt-pans pay a license-fee for the earth that they utilize, which varies, according to the productiveness of the soil or other local causes, from three annas to about Rs. 20 per pan. The revenue from this source for 1867-68 was Rs. 13,007-12-6.
3. (*a*) Is any salt imported into Mysore?	3. (*a*) Yes.
(*b*) If so, what is the aggregate amount yearly so imported?	(*b*) According to the sayer accounts, it would appear that about 8,563 maunds of earth-salt was imported in 1863-64, and 1,37,889½ maunds of sea-salt in 1850-51. Information on this head of a more recent date is not available, as the sayer duties on the above salts were abolished at the end of the years specified, and consequently no accounts of a later date were received here.
(*c*) Whence it is derived.	(*c*) The inhabitants of Ashtagram, and that portion of the Nugur Division contiguous to the western range of ghâts, receive their salt from the western coast. The imports into the former division are from Cannanore, Calicut, Tellicherry, and Mangalore, by the passes of Manantoddy, Bisley, Cicily, Sumpaggy, &c., while it is received in the Nugur Talooks from the pans in the Canara District, *vid* the Agumby and Garsappa Ghâts. The Bangalore and Colar Districts, in the Nundidroog Division, receive their supply of sea-salt from the Collectorates of Madras and South Arcot.
(*d*) How much comes from each source?	(*d*) The quantity of salt imported from the western coast is stated to be 66,384 maunds.
(*e*) What kind of carriage brings it (carts, rail, boats, pack-bullocks)?	(*e*) Pack-bullocks and asses are used on the ghâts for conveying the above, while on the plains two-wheeled carts are sometimes substituted. The quantity received from the Madras Presidency is estimated at 11,89,018 maunds, all of which is conveyed by the line of railway from that Presidency.
(*f*) By what main routes and important marts does it come? and	(*f*) The salt thus imported from all the above sources into the Mysore Province does not pass contiguous to or through any important market town.
(*g*, *h*) Does the Mysore Government levy any import tax on it; and if so, what, and how?	(*g*, *h*) No tax of any description is levied on salt, whether imported or exported.

QUESTION.

ANSWER.

The above answers refer to sea-salt only. The following particulars are with regard to earth-salt. The quantity of (earth) salt imported from the collectorates and districts bordering on the Mysore Province is, according to the sayer accounts for the year in which the duty was abolished (*viz.*, 1863-64), 9,060 maunds, of which 660 maunds were received from the Dharwar Collectorate in the Bombay Presidency, and 8,400 maunds from the Talooks of Shidota and Muddenpully in the Cuddapah District, and Hindoopore, Penagondah, Roydroog, Mudduckseera, and Coodligi, in the Billary Collectorate. It is hard to say if the trade in this condiment has increased during the past five years, as there is no reliable data to go upon, except the sayer accounts for the years already named.

4. (*a*) What may the population of Mysore be estimated at?

4. (*a*) According to the census of 1866-67, the population of Mysore may be reckoned at 39,09,141.

(*b*) What during the past twelve months has been the average price of the more important salts (which you will have noticed in your replies to the above questions) at each of the three or four great marts of Mysore, per Government maund of 3,200 tolas?

(*b*) As sea-salt is used by more than two-thirds of the population of Mysore, I think it may be considered more important than the other (*viz.*, earth-salt).

The following is the average price of this description of salt in three of the principal markets in the Province :—

Bangalore,	Rs.	2	1	4	per maund.
Mysore,	,,	3	2	7	ditto
Shimogah,	,,	3	7	0	ditto

The average price of the earth-salt in Chituldroog—the only important market where it meets with a ready sale—is stated to be about Rs. 2–2–0 per maund.

(*c*) And what do your people estimate the consumption of salt per head of the Mysore population at, giving the data on which they found their opinions?

(*c*) The quantity of salt calculated to to be consumed by each individual in this Province may be estimated at two tolas per head of sea-salt, and three tolas if earth-salt be used, per diem. This deduction has been arrived at by striking an average on the quantity of salt used in 1841, and the estimated population of the Province at that period.

It may here be observed that no other than earth-salt is used throughout the District of Chituldroog, in a few of the Talooks of the Toomkoor, Shimoga, Cudoor, and Hassan Districts, as well as a few other districts where it is but partially used by the indigent classes.

Extract from the Letter of the Officiating Secretary to the Chief Commissioner, Mysore, No. 685, dated 7th May, 1869.

"As imports into the Province are not subjected to any Customs duty, the returns on this head are not very reliable. From the same cause no precise information can be given as to the localities from which salt is imported.

Salt Imported.						*Local Produce of Salt.*						*Population.*					
1866-67.			1867-68.			1866-67.			1867-68.			1866-67.			1867-68.		
Tons.	Cwt.	lbs.	Tons.	Cwt.	lbs.	Tons.	Cwt.	lbs.	Tons.	Cwt.	lbs.	Male.	Female.	Total.	Male.	Female.	Total.
7,557	11	40	10,852	0	0	2,408	13	0	546	18	0	2,097,318	1,803,417	3,900,735	2,135,273	1,794,442	3,929,715

Table giving the Names of the Talooks in which Earth-salt is Manufactured, their distance and direction from the nearest town of importance, &c., &c.

Division.	District.	Talooks in which Manufactured.	Number of Pans.	Amount of Rent realized from Pans for 1867-68.	Name of the nearest important Town.	Probable Distance from the nearest important Town.	Direction from the nearest important Town.
				Rs. As. P.		Miles.	
Nundidroog.	Bangalore.	Ooscottah, ...	3	1 14 2	Bangalore, ...	18	To the east.
		Dodda Ballapore, ...	7	6 9 2	Ditto, ...	24	North.
		Dawnhulli, ...	96	288 2 0	Ditto, ...	24	North-east.
		Surjapore, ...	4	1 2 7	Ditto, ...	16	South-east.
		Yelahunka, ...	1	0 14 0	Ditto, ...	10	North.
		Total, ...	111	298 9 11			
	Colar.	Colar, ...	74	588 8 0	Colar, ...	...	
		Baitmungul, ...	20	20 1 4	Ditto, ...	18	To the south-east.
		Srinivaspore, ...	16	45 3 4	Ditto, ...	25	North-east.
		Moolwagul, ...	45	76 9 0	Ditto, ...	18	East.
		Goomnaikpolbein, ...	12	13 10 5	Ditto, ...	35	North-west.
		Goribednore, ...	15	14 9 10	Chota & Dodda Ballapore.	23½ & 20	Ditto & north.
		Goodilunda, ...	12	9 9 10	Chota Ballapore, ...	20	North.
		Amhajidroog, ...	47	352 13 0	Colar, ...	22½	North.
		Sidlaghat, ...	35	36 5 5	Chota Ballapore, ...	13¼	South-east.
		Chota Ballapore, ...	11	7 12 8	Ditto, ...	...	...
		Maloor, ...	11	31 10 7	Bangalore & Colar,	26 & 20	East & south-west.
		Total, ...	298	1,196 13 5			
	Toomkoor.	Toomkoor, ...	94	287 11 8	Toomkoor, ...	...	
		Koortig Riri, ...	25	48 4 2	Ditto, ...	18	To the north-east.
		Coonghul, ...	17	12 11 2	Ditto, ...	23½	South.
		Cudub, ...	17	55 0 0	Ditto, ...	15	South-west.
		Toorvakere, ...	33	356 7 3	Honvulli and Toomkoor.	24 & 40	South-east & south-west.
		Chickanaikenhulli,	1	3 5 7	Toomkoor, ...	41	North-west.
		Honvulli, ...	21	167 15 8	Tiptoor and ditto, ...	8½ & 53½	West.
		Hoolioordroog, ...	15	19 1 1	Coonghul, ...	15	South.
		Seerah, ...	360	2,273 11 6	Toomkoor, ...	26	North.
		Total, ...	583	3,224 4 1			
		Total Division, ...	992	4,719 11 5			

Table giving the Names of the Talooks in which Earth-salt is Manufactured, their distance and direction from the nearest town of importance, &c. &c.—(Concluded.)

Division.	District.	Talooks in which Manufactured.	Number of Pans.	Amount of Rent realized from Pans for 1867-68.	Name of the nearest important Town.	Probable Distance from the nearest important Town.	Direction from the nearest important Town.
				Rs. As. P.		Miles.	
Asht agram.	Mysore.	Periapatam, ...	1	1 7 3	Mysore, ...	32¾	To the west.
		Goondulpett, ...	1	2 6 0	Ditto, ...	38½	South.
		Chamrajungur, ...	85	129 0 2	Ditto, ...	39	South-east.
		Nunjengod, ...	6	5 4 0	Ditto, ...	15	South.
		Sulkad, ...	133	143 2 9	Ditto, ...	29½	South-east.
		Mulmulli, ...	11	8 13 4	Ditto, ...	51	North-east.
		Mundiem, ...	167	92 7 4	Ditto, ...	27½	Ditto.
		Mudoor, ...	21	16 6 1	Ditto, ...	38½	Ditto.
		Total, ...	425	398 14 11			
	Hassan.	Hassan, ...	12	70 0 0	Hassan, ...	...	...
		Nagamungalum, ...	83	130 0 0	Ditto, ...	43	To the south-east.
		Cheurinpatam, ...	16	268 8 8	Ditto, ...	23	Ditto.
		Haruhulli, ...	42	150 2 4	Ditto, ...	20	North.
		Total, ...	153	618 11 0			
		Total Division, ...	578	1,017 9 11			
Nugur.	Shimoga.	Chennagiri, ...	76	331 14 0	Shimoga, ...	27¼	To the north-east.
		Honnilli, ...	3	2 9 6	Ditto, ...	10¼	North.
		Total, ...	79	334 7 6			
	Cudoor.	Cudoor, ...	48	84 3 10	Chikmoogloor, ...	12	To the north-east.
		Turikere, ...	40	326 0 0	Shimoga, ...	24	South-east.
		Banawar, ...	62	184 15 0	Chikmoogloor, ...	22	North-east.
		Total, ...	150	595 2 10			
	Chituldroog.	Chituldroog, ...	39	200 0 0	Chituldroog, ...	...	...
		Davengiri, ...	60	540 0 0	Ditto, ...	39	To the north-west.
		Kancooppa, ...	57	257 8 0	Ditto, ...	27¼	North.
		Moolcalmooroo, ...	21	63 12 5	Ditto and Bellary,	40 & 41	Do. & south-west.
		Doderi, ...	125	1,000 0 0	Ditto, ...	20	North-east.
		Herioor, ...	231	2,046 13 11	Ditto and Seerah,	24 & 25	South-east & North-west.
		Boodihal, ...	53	133 4 1	Ditto, ...	...	South.
		Hosdroog, ...	152	1,300 0 0	Ditto, ...	...	Ditto.
		Pougurh, ...	114	719 4 5	Ditto, ...	68	East.
		Hurihur, ...	63	70 2 0	Ditto, ...	48	North-west.
		Total, ...	915	6,340 12 10			
		Total Division, ...	1,944	7,270 7 2			
		Total 3 Divisions...	3,514	13,007 12 6			

BOMBAY SALT.

Extract from the Bombay Commissioner of Customs' Letter No. 2262, *dated* 11*th June*, 1869.

"I have the honour to subjoin a brief statement showing the total amount of salt that paid duty, and of duty realized therefrom, in the Bombay Presidency, exclusive of Scinde, during the official year 1867-68 :—

Year.	Total Quantity of Duty-paid Salt.	Rate of duty per Maund.	Total amount of Duty.
		Rs. As. P.	Rs.
1867-68, ...	32,04,675	1 8 0 *	48,06,153
	92,601	0 11 11¼	69,029
	38,002	0 1 0 †	2,376
	10,02,157	0 0 3 ‡	15,659
	43,37,435		48,93,217
Issued Free of Duty to Native Chiefs, and for Exportation to Calcutta, Penang, Singapore, &c., ...	1,91,146		
	45,28,581		

According to the latest returns, the estimated population of the Bombay Presidency, exclusive of Scinde and non-regulation Districts, is 1,10,25,254, as published at page 12 of Vol. XII., Part I., of the Annals of Indian Administration for 1866-67."

HYDERABAD SALT.

HYDERABAD SALT.

Extract from the Officiating 1*st Assistant Resident's Letter No.* 1611, *dated* 22*nd May*, 1869.

"The population of Hyderabad, exclusive of the Berars, is estimated at about ten millions.

"The population of the Berars according to the latest estimate is 22,31,565.

"In regard to the amount of salt imported into, or made in, Hyderabad, His Highness the Nizam's Minister furnished on application two statements, which are enclosed. They, however, do not contain the information for the official year 1868-69, nor do they show the extent of the home-manufacture in His Highness' dominions."

Statement showing Exports of Indigenous Salt from the Nizam's Dominions from 1275 *to* 1277 *Fuslee, inclusive.*

Years.	Quantity Exported.	Remarks.
1275 Fuslee, A.D. 1865-66.	472 Bullock-loads.	A bullock-load is equal to 120 seers, or 240lbs.
1276 Fuslee, A.D. 1866-67.	431 ditto.	
1277 Fuslee, A.D. 1867-68.	273 ditto.	
Total, ...	1,176 Bullock-loads	

Statement showing Imports of Sea-salt into the Nizam's Dominions form 1275 *to* 1277 *Fuslee, inclusive.*

Years.	Quantity Imported into the Nizam's Dominion from Masulipatam.	Quantity Imported into the Nizam's Dominions from Kokan.	Total.	Remarks.
	Bullock-loads	Bullock-loads.	Bullock-loads.	
1275 Fuslee, A. D. 1865-66, ...	1,61,187	1,39,708	3,00,895	A bullock-load is equal to 120 seers, or 240lbs.
1276 Fuslee, A. D. 1866-67, ...	2,10,576	1,37,332	3,17,908	
1277 Fuslee, A. D. 1867-68, ...	1,54,464	1,06,868	2,61,332	
Total, ...	5,26,227	3,83,908	9,10,135	

* This is salt consumed in the Bombay Presidency and Central India.

† This is salt exported to foreign ports under the Madras Presidency.

‡ This is salt exported to British ports under the Madras Presidency, where it pays the Rs. 1-8-0 duty.

the 1st March, 1869.

		Mohurrirs.										
Number of residents of distant parts.	Number of men whose families reside on the Line.	Total number of Executives sanctioned.	Total number in employ on 1st March, 1869.	Total number of Mussulmans.	Total number of Hindoos.	Number of Brahmins.	Number of Rajpoots.	Number of Kaiths.	Number of other Hindoo castes.	No. of residents in districts bordering on, or part of the Division.	Number of residents of distant parts.	No. of men whose families reside on the Line.
3	2	12	10	3	7	1	...	1	5	1	9	4
5	2	11	11	1	10	...	...	5	5	3	8	4
8	2	24	23	3	20	4	...	13	3	2	21	5
16	6	47	44	7	37	5	...	19	13	6	38	13
94·11	35·29	...	...	15·90	84·09	11·36	...	43·18	29·54	13·63	86·36	29·54
7	5	14	14	3	11	...	...	8	3	6	8	9
9	4	20	20	5	15	...	...	14	1	2	18	3
11	3	19	19	3	16	...	...	14	2	...	19	2
27	12	53	53	11	42	...	...	36	6	8	45	14
93·10	41·37	...	...	20·75	79·24	...	...	67·92	11·32	15·09	84·9	26·41
9	...	15	15	2	13	...	...	13	...	1	14	3
6	1	11	10	4	6	...	...	6	...	...	10	2
13	2	16	16	11	5	...	...	5	...	...	16	5
8	3	8	8	1	7	...	...	6	1	1	7	1
36	6	50	49	18	31	...	...	30	1	2	47	11
100	16·66	...	...	36·73	63·26	...	...	61·22	2·04	4·08	95·91	22·44
21	3	24	22	6	16	...	...	15	1	12	10	5
8	1	16	16	7	9	1	...	7	1	5	11	3
29	4	40	38	13	25	1	...	22	2	17	21	8
74·36	10·25	...	...	34·21	65·19	2·63	...	57·89	5·26	44·74	55·27	21·05
108	28	190	184	49	135	6	...	107	22	33	151	46
89·25	23·14	...	...	25·62	73·36	3·26	...	58·15	11·95	17·93	82·06	25
6	2	8	8	3	5	...	...	3	2	...	8	2
100	33·33	...	...	37·5	62·5	...	...	37·5	25	...	100	25

ALLAN HUME,

Commissioner, Inland Customs.

APPENDIX H.

Statement showing the Strength and Constitution of the Force of the Inland Customs on the 1st March, 1869.

Division.	Total number of Executives sanctioned.	Total in employ on 1st March, 1869.	Total number of Mussulmans.	Total number of Hindoos.	Number of Brahmins.	Number of Rajpoots.	Number of Kaiths.	Number of other Hindoo Castes.	Number of residents in districts bordering on, or part of the Division.	Number of residents of distant parts.	Number of men whose families reside on the Line.
Sirsa, ...	197	197	376	421	59	81	7	274	4	799	37
Hansie, ...	766	766	315	451	45	87	2	317	68	698	3
Delhi, ...	1,305	1,300	595	705	95	270	12	328	573	725	7
Total, ...	2,268	2,263	1,286	1,577	199	438	21	919	647	2,216	36
Percentage, ...	...	...	44·91	55·08	6·94	15·29	·73	32·09	22·55	77·40	1·25
Mutra, ...	663	663	303	360	139	68	23	132	39	635	11
Agra, ...	1,313	1,313	550	663	230	197	57	179	317	896	20
Jhansie, ...	1,329	1,326	721	1,105	343	483	86	193	125	1,701	115
Total, ...	3,705	3,702	1,574	2,128	712	748	166	504	470	3,232	146
Percentage, ...	...	...	42·52	57·48	19·23	20·15	4·48	13·61	12·69	87·30	3·94
Saugor, ...	1,079	1,079	430	649	207	153	47	142	21	1,058	166
Hoshungabad, ...	839	789	317	472	180	106	30	156	3	786	41
Nagpore or Wurdah, ...	1,261	1,261	414	847	312	230	38	267	51	1,210	95
Balpore, ...	397	391	114	277	72	38	18	149	35	356	51
Total, ...	3,576	3,520	1,275	2,245	871	527	133	714	110	3,410	353
Percentage, ...	...	...	36·22	63·78	24·74	14·97	3·77	20·28	3·12	96·87	10·02
Internal N.-W. P., ...	871	816	396	420	111	114	65	130	136	690	61
Ditto Oudh, ...	308	287	151	136	44	12	35	45	34	193	22
Total, ...	1,179	1,103	547	556	155	126	100	175	220	883	83
Percentage, ...	...	...	49·59	50·4	14·05	11·42	9·06	15·86	19·94	80·05	7·52
Grand Total, ...	11,328	11,188	4,682	6,506	1,937	1,837	420	2,312	1,447	9,741	618
Percentage, ...	...	...	41·84	58·15	17·35	16·42	3·75	20·65	12·92	87·06	5·52
Berar, ...	1,191	1,191	319	872	247	281	24	320	16	1,175	53
Percentage, ...	...	...	18·38	81·61	22·05	25·09	2·01	26·86	1·37	98·65	4·77

Sub-Assistant Patrols.

Division.	Total number of Executives sanctioned.	Total number in employ on 1st March, 1869.	Total number of Christians.	Total number of Mahomedans.	Total number of Hindoos.	Number of Brahmins.	Number of Rajpoots.	Number of Kaiths.	Number of other Hindoo Castes.	Number of residents in districts bordering on, or part of the Division.	Number of residents of distant parts.	Number of men whose families reside on the Line.
Sirsa, ...	5	3	1	...	2	...	...	1	1	...	3	2
Hansie, ...	6	6	...	2	4	...	...	3	1	1	5	2
Delhi, ...	12	8	...	2	6	2	...	3	1	...	9	2
Total, ...	23	17	1	4	12	2	...	7	3	1	16	6
Percentage, ...	...	...	5·88	23·52	70·58	11·76	...	41·17	17·64	5·88	94·11	35·29
Mutra, ...	8	8	...	1	7	...	1	6	...	1	7	5
Agra, ...	10	10	...	1	9	1	...	5	3	1	9	4
Jhansie, ...	15	11	...	2	9	1	...	7	1	...	11	3
Total, ...	33	29	...	4	25	2	1	18	4	2	27	12
Percentage, ...	...	...	...	13·74	86·20	6·89	3·44	62·06	13·78	6·89	93·10	41·37
Saugor, ...	9	9	...	4	5	...	...	5	...	...	9	...
Hoshungabad, ...	6	6	...	2	4	...	...	3	1	...	6	1
Nagpore or Wurdah, ...	13	13	...	6	7	...	...	5	2	...	13	2
Balpore, ...	8	8	...	5	3	...	...	1	2	...	8	3
Total, ...	36	36	...	17	19	...	...	14	5	...	36	6
Percentage, ...	...	...	...	47·22	52·77	...	...	38·88	13·88	...	100	16·66
Internal N.-W. P., ...	32	30	...	21	9	2	...	7	...	9	21	3
Ditto Oudh, ...	9	9	...	4	5	...	...	3	2	1	8	1
Total, ...	41	39	...	25	14	2	...	10	2	10	29	4
Percentage, ...	...	...	...	64·1	35·89	5·13	...	25·64	5·12	25·64	74·35	10·25
Grand Total, ...	131	121	1	50	70	6	1	49	14	13	108	23
Percentage, ...	...	...	·83	41·32	57·85	4·95	·83	40·49	11·57	10·74	89·25	23·14
Berar, ...	6	6	...	3	3	...	...	3	...	...	6	2
Percentage, ...	...	...	...	0·50	0·50	...	...	0·50	...	...	100	33·33

Mohurrirs.

Division.	Total number of Executives sanctioned.	Total number in employ on 1st March, 1869.	Total number of Mussulmans.	Total number of Hindoos.	Number of Brahmins.	Number of Rajpoots.	Number of Kaiths.	Number of other Hindoo castes.	No. of residents in districts bordering on, or part of the Division.	Number of residents of distant parts.	No. of men whose families reside on the Line.
Sirsa, ...	12	10	3	7	1	...	1	5	1	9	4
Hansie, ...	11	11	1	10	...	...	3	5	3	8	4
Delhi, ...	24	23	3	20	4	...	13	3	2	21	5
Total, ...	47	44	7	37	5	...	19	13	6	38	13
Percentage, ...	...	...	15·90	84·09	11·36	...	43·18	29·54	13·63	86·36	29·54
Mutra, ...	14	14	3	11	...	...	8	3	6	8	9
Agra, ...	20	20	5	15	...	...	14	1	2	18	3
Jhansie, ...	19	19	3	16	...	...	14	2	...	19	2
Total, ...	53	53	11	42	...	...	36	6	8	45	14
Percentage, ...	...	...	20·75	79·24	...	...	67·92	11·32	15·09	84·9	26·41
Saugor, ...	15	15	2	13	...	...	13	...	1	14	3
Hoshungabad, ...	11	10	4	6	...	...	6	...	...	10	2
Nagpore or Wurdah, ...	16	16	11	5	...	...	5	...	...	16	5
Balpore, ...	8	8	1	7	...	...	6	1	1	7	1
Total, ...	50	49	18	31	...	...	30	1	2	47	11
Percentage, ...	...	...	36·73	63·26	...	...	61·22	2·04	4·08	95·91	22·44
Internal N.-W. P., ...	24	22	6	16	...	...	15	1	12	10	5
Ditto Oudh, ...	16	16	7	9	1	...	7	1	5	11	3
Total, ...	40	38	13	25	1	...	22	2	17	21	8
Percentage, ...	...	...	34·21	65·19	2·63	...	57·89	5·26	44·74	55·27	21·05
Grand Total, ...	190	184	49	135	6	...	107	22	33	151	46
Percentage, ...	...	...	25·63	73·36	3·26	...	58·15	11·95	17·93	82·06	25
Berar, ...	8	8	3	5	...	...	3	2	...	8	2
Percentage, ...	...	...	37·5	62·5	...	...	37·5	25	...	100	25

ALLAN HUME,
Commissioner, Inland Customs.

No. 2.

Statement No. 2.

Comparative Statement of Collections of the Inland Customs, subordinate to the Governments of the North-Western Provinces, Punjab, Central Provinces, Oudh, and Hyderabad, showing the quantity of Salt and refined and unrefined Sugar for the official year 1868-69.

	SALT.				SUGAR.												COMPARATIVE RESULTS IN 1868-69.											
	1868-69.		1867-68.		*Refined.*				*Unrefined.*				*Total.*				Salt.				Sugar.							
					1868-69.		1867-68.		1868-69.		1867-68.		1868-69.		1867-68.						*Refined.*				*Unrefined.*			
	Quantity.	Duty.	Quantity.	Duty.	Quantity.	Duty.	Quantity.	Duty.	Quantity.	Duty.	Quantity.	Duty.	Quantity.	Duty.	Quantity.	Duty.	Increase.		Decrease.		Increase.		Decrease.		Increase.		Decrease.	
	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.
Sirsa, ...	5,534	16,741	7,341	21,577	14,069	14,069	26,446	26,447	65,746	24,653	1,30,589	45,221	79,815	38,724	1,57,034	81,668	...	...	1,647	4,826	...	...	23,377	23,379	...	...	64,842	20,554	...	...	77,219	43,944
Hansi, ...	5,54,353	15,73,997	5,14,747	15,44,240	1,20,963	1,20,963	2,07,707	2,07,708	1,09,911	43,717	1,91,977	71,993	2,30,873	1,69,680	3,99,684	2,79,700	9,545	29,257	...	...	...	...	86,743	86,743	...	...	82,066	20,073	...	...	1,48,811	1,10,080
Delhi, ...	8,99,242	26,97,725	8,79,704	26,39,113	1,35,454	1,35,454	2,35,197	2,35,197	4,11,194	1,64,194	5,50,703	2,05,514	6,10,618	3,53,825	7,85,900	4,41,711	19,538	58,613	...	...	...	...	1,03,763	1,03,763	...	...	1,28,549	52,320	...	...	2,25,312	2,05,963
Total, Punjab, ...	14,39,169	43,87,463	14,01,792	42,05,030	3,24,485	3,24,486	5,69,350	5,69,352	6,06,851	2,97,564	8,73,268	3,38,727	9,41,306	5,62,032	14,42,618	9,25,079	29,083	87,249	1,647	4,826	...	...	2,64,883	2,64,886	...	...	2,75,457	93,101	...	...	5,51,342	3,61,987
Mutra, ...	5,08,396	15,24,839	4,15,419	13,46,257	65,774	65,774	1,70,193	1,70,195	1,29,296	48,487	1,46,542	54,954	1,95,070	1,14,262	3,17,137	1,85,149	92,979	2,78,938	...	...	...	...	44,920	44,920	...	...	17,244	6,467	...	...	62,164	31,387
Agra, ...	9,86,836	29,60,081	9,63,664	29,56,994	1,26,139	1,26,141	2,84,553	2,86,553	2,82,215	98,337	2,41,479	90,559	4,08,354	2,24,478	5,25,031	3,77,112	21,022	63,067	...	...	...	...	89,413	89,419	26,726	7,778	...	...	...	...	67,677	30,684
Jhansie, ...	77,745	2,33,237	1,32,433	3,97,301	47,256	47,256	63,341	63,341	31,491	30,503	74,372	27,855	1,26,747	77,758	1,37,713	91,196	...	...	44,984	1,34,954	...	...	16,045	16,045	7,819	2,707	...	...	8,838	13,338
Total, N.-W. Provinces,	15,73,729	47,18,193	13,99,516	45,10,582	3,11,169	3,11,171	4,60,453	4,60,089	4,73,004	1,77,326	4,62,393	1,73,368	7,84,214	4,88,598	9,25,781	6,33,457	1,13,001	3,41,700	44,984	1,34,954	...	...	1,49,379	1,49,377	27,915	10,485	17,244	6,467	...	...	1,30,342	1,42,339
Sangor, ...	1,57,842	4,73,531	2,57,240	7,71,722	56,166	56,166	37,142	37,142	11,032	4,136	13,490	5,059	49,548	42,302	50,632	42,201	...	...	93,393	2,80,181	1,024	1,025	...	...	...	...	2,400	900	...	131	1,364	...
Hoshungabad, ...	32,166	96,500	32,736	97,822	13,710	13,710	12,361	12,361	...	...	...	...	13,710	13,710	12,361	12,361	...	...	8,695	7,827	729	729	...	...	...	...	...	...	729	729	...	...
Nagpore, ...	4,44,333	6,68,627	3,34,627	5,35,330	37,115	37,116	10,881	10,881	...	...	...	...	37,115	37,116	10,881	10,881	89,906	1,33,107	...	...	16,234	16,235	...	...	...	...	...	...	16,234	16,235	...	...
Raipore, ...	1,34,360	3,02,440	1,81,903	3,72,951	431	432	454	454	...	...	...	...	431	432	454	454	...	...	46,949	70,423	...	...	23	23	...	...	...	...	23	23	...	22
Total, C. Provinces, ...	7,68,440	14,34,598	8,06,573	16,77,941	79,422	79,424	61,438	61,438	11,032	4,136	13,490	5,059	90,504	83,560	74,948	66,817	89,906	1,33,107	1,53,039	3,76,440	17,987	17,989	23	23	...	...	2,400	900	16,963	17,095	1,387	22
Internal, N.-W. Provinces,	16,135	24,830	11,468	33,023	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1,873	1,094	...	...	...	...	...	...	...	...	...	...	...	...
Ditto Oudh, ...	9,326	9,777	2,439	8,065	...	...	...	...	...	...	...	...	...	...	...	...	227	284	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total, Internal, ...	13,061	43,611	14,107	44,022	...	...	...	...	...	...	...	...	...	...	...	...	227	284	1,873	1,094	...	...	...	...	...	...	...	...	...	...	...	...
Grand Total, ...	37,85,398	1,04,63,876	37,23,989	1,04,87,553	7,15,076	7,15,081	11,31,296	11,31,299	10,90,887	4,69,026	13,39,051	5,09,154	18,16,024	11,24,240	24,60,347	16,25,453	2,33,117	5,82,747	2,01,547	5,46,434	17,987	17,989	4,14,186	4,14,186	27,915	10,485	2,76,071	1,01,521	16,963	17,095	6,51,386	5,06,326
Deduct Decrease, ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2,01,547	5,46,434	...	...	...	...	17,987	17,989	...	...	27,915	10,485	...	...	16,963	17,095
Net Increase, ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	31,570	36,313	...	...	...	...	3,96,199	3,96,197	...	...	2,48,156	91,036	...	...	6,44,423	4,89,231
Berar Line, ...	2,09,130	3,00,230	81,070	91,630	...	...	1,018	1,022	...	...	...	...	...	...	1,022	1,022	1,30,115	2,08,878	...	...	1,022	1,022	...	...	...	...	...	...	1,022	1,022	...	...

AGRA:
The 17th April, 1869.

ALLAN HUME,
Commissioner of Inland Customs.

No. I.

Comparative Statement showing the actual Receipts and Charges of the Inland Customs during the years 1867-68 *and* 1868-69.

Customs Houses.	Gross Collections.								Charges.		Net Collections.		Percentage of Charges on Gross Collections.	
	Salt.		Sugar.		Miscellaneous.		Total.							
	1867-68.	1868-69.	1867-68.	1868-69.	1867-68.	1868-69.	1867-68.	1868-69.	1867-68.	1868-69.	1867-68.	1868-69.	1867-68.	1868-69.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs. A. P.	Rs. A. P.
Sirsa, ...	21,577	16,741	81,668	38,724	1,919	1,437	1,05,164	56,902	93,016	1,04,493	12,148	47,591	88 7 2	183 4 3½
Hansie, ...	15,44,360	15,72,997	2,79,700	1,69,680	913	2,253	18,24,973	17,44,930	88,446	97,147	17,36,527	16,47,783	4 13 6	5 9 0¾
Delhi, ...	26,39,113	26,97,725	5,61,711	3,53,628	6,724	4,989	32,07,548	30,56,342	1,59,450	1,55,312	30,48,098	29,01,030	4 15 6	5 1 3½
Total, Punjab Section, ...	42,05,050	42,87,463	9,23,079	5,62,032	9,556	8,679	51,37,685	48,58,174	3,40,912	3,56,952	47,96,773	45,01,222	6 10 2	7 5. 6
Muttra, ...	12,46,257	15,24,893	1,65,549	1,14,262	1,246	2,001	14,13,052	16,41,156	83,683	84,707	13,29,369	15,56,449	5 14 9	5 2 4½
Agra, ...	28,96,994	29,60,061	3,77,112	2,96,478	3,642	5,784	32,77,748	32,62,323	1,92,087	2,15,744	30,85,661	30,46,579	5 13 9	6 9 9¾
Jhansie, ...	3,67,301	2,33,237	91,196	77,858	2,131	2,868	4,60,628	3,13,963	1,73,827	1,95,633	2,86,801	1,18,330	37 12 3	62 4 5
Total, N.-W. Provinces, ...	45,10,552	47,18,191	6,33,857	4,88,598	7,019	10,653	51,51,428	52,17,442	4,49,597	4,96,084	47,01,831	47,21,358	8 11 7	9 8 1
Saugor, ...	7,71,722	4,73,531	42,204	42,322	7,110	25,935	8,21,033	5,41,788	1,36,941	1,59,478	6,84,092	3,82,310	16 10 10	29 6 11½
Hoshungabad, ...	97,827	90,000	12,981	13,710	5,275	2,441	1,16,083	1,06,151	1,05,392	92,514	10,691	13,637	90 12 10	87 2 5
Nagpore, ...	5,35,530	6,68,637	10,881	27,116	6,228	3,899	5,52,639	6,99,652	1,59,681	1,65,755	3,92,958	5,33,897	28 14 4	23 11 0
Raipore, ...	2,72,862	2,02,440	454	432	15,448	6,809	2,88,764	2,09,681	65,963	64,210	2,22,801	1,45,471	22 13 6	30 9 11
Total, Central Provinces, ...	16,77,941	14,34,608	66,517	83,580	34,061	39,084	17,78,519	15,57,272	4,67,977	4,81,957	13,10,542	10,75,315	26 5 0	30 15 2
Internal, N.-W. Provinces,	85,929	34,835	...	...	51,685	46,459	87,614	81,294	1,56,681	1,78,453	...	...	178 13 3	219 8 3
Ditto, Oudh, ...	8,093	8,777	...	...	4,518	2,816	12,611	11,593	54,594	56,338	...	...	432 14 6	485 15 8
Total, Internal, ...	44,022	43,612	...	...	56,203	49,275	1,00,225	92,887	2,11,275	234,791	...	...	210 12 9	252 12 4
Grand Total, ...	1,04,37,565	1,04,83,874	16,23,453	11,34,210	1,06,839	1,07,691	1,21,67,857	1,17,25,775	14,69,761	15,69,784	1,06,98,096	1,01,55,991	12 1 3	13 6 2
Berar Line, ...	91,620	3,00,293	1,028	...	13	2,508	92,661	3,02,801	47,233	1,28,298	45,428	1,74,503	50 15 7	42 5 11

AGRA:
The 17th April, 1869.

ALLAN HUME,
Commissioner of Inland Customs.

A.

Comparative Statement of Cost of Establishment of the Commissioner of Inland Customs' Office, as it stood on the 1st May, 1859, and as now sanctioned, 1st April, 1869.

	Monthly cost of Establishment.		*Annual cost of Establishment.*		*Length of Jurisdiction in miles.*		*Total amount of collections, including double duty, &c.*		*Annual charge per mile of Line.*		*Annual charge per cent. on collections.*	
	On the 1st May, 1859.	As now sanctioned.	In 1859.	As now sanctioned.	On the 1st May 1859.	On the 1st April, 1869.	From 1st May, 1858, to 30th April, 1859.	From 1st April, 1868, to 31st March, 1869.	In 1859.	In 1869.	In 1859.	In 1869.
	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.			Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.
Commissioner of Inland Customs' Office,	1,111	1,100	13,332	13,200	907¼	2,102	61,64,362	1,20,28,576	14 11 2	6 4 6	0 3 6	0 1 9

AGRA:
The 17th April, 1869.

ALLAN HUME,
Commissioner of Inland Customs.

B.

Comparative Statement of Cost of Deputy Commissioners,' Assistant Commissioners,' and Collectors' Sudder Offices, as they stood on the 1st May, 1859, and as now sanctioned, 1st April, 1869.

	Monthly cost of Establishment.		*Annual cost of Establishment.*		*Length of the Customs Line.*		*Total amount of collections, including double duty, &c.*		*Annual charge per mile of Line.*		*Annual charge per cent. on Collections.*	
	On the 1st May, 1859.	As now sanctioned.	In 1859.	As now sanctioned.	On the 1st May, 1859.	On the 1st April, 1869.	From 1st May, 1858, to 30th April, 1859.	From 1st April, 1868, to 31st March, 1869.	In 1859.	In 1869.	In 1859.	In 1869.
	Rs.	Rs.	Rs.	Rs.			Rs.	Rs.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.
Sirsa, ...	395	290	4,740	3,480	117	126½	65,638	56,902	40 8 2	27 8 2	7 3 6	6 1 10
Hansie, ...	528	395	6,336	4,740	85	69½	13,78,207	17,44,930	74 8 8	68 3 2	0 7 4	0 4 4
Delhi, ...	768	625	9,216	7,500	103	96½	13,19,257	30,56,342	89 7 7	77 11 6	0 11 2	0 3 11
Total, ...	1,691	1,310	20,292	15,720	305	292½	27,63,102	48,58,174	66 8 6	53 11 10	0 11 9	0 5 2
Muttra, ...	597	523	7,164	6,276	52½	52½	11,31,370	16,41,156	136 7 3	119 8 8	0 10 1	0 6 1
Agra, ...	741	690	8,892	8,280	109½	105	18,07,317	32,62,323	81 3 3	78 13 8	0 7 10	0 4 0
Jhansie, ...	381	459	4,572	5,508	162½	172	1,31,468	3,13,963	28 2 10	32 0 4	3 7 7	1 12 0
Total, ...	1,719	1,672	20,628	20,064	324½	329½	30,70,155	52,17,442	63 9 10	60 14 3	0 10 9	0 6 1
Saugor, ...	605	415	7,260	4,980	115	139½	2,45,690	5,41,788	63 2 1	35 11 2	2 15 3	0 14 8
Hoshungabad, ...	503	370	6,036	4,440	163	286	85,415	1,06,151	37 0 6	15 8 4	7 1 0	4 2 11
Nagpore, ...	...	422	...	5,064	...	452½	...	6,99,652	...	11 3 0	...	0 11 7
Raipore, ...	...	302	...	3,624	...	268	...	2,09,681	...	13 8 4	...	1 11 7
Total, ...	1,108	1,509	13,296	18,108	278	1,146	3,31,105	15,57,272	47 13 3	15 12 9	4 0 3	1 2 7
Internal, N.-W. Provinces,... ...	...	420	...	5,040	...	...	...	81,294	...	...	...	6 3 2
Internal, Oudh, ...	...	196	...	2,352	...	...	...	11,593	...	...	...	20 4 7
Total, ...	...	616	...	7,392	...	...	...	92,887	...	...	...	7 15 3
GRAND TOTAL, ...	4,518	5,107	54,216	61,284	907½	1,768	61,64,362	1,17,25,775	59 10 4	30 7 8	0 12 3	0 8 4
Berar Line, ...	...	174	...	2,088	...	334	...	3,02,801	...	6 8 9	...	0 11 0

AGRA:
The 17th April, 1869.

ALLAN HUME,
Commissioner of Inland Customs.

C.

Comparative Statement of Cost of the Mofussil Customs' Establishments, exclusive of Commissioners,' Deputy Commissioners,' Assistant Commissioners,' and Collectors' Offices, as they stood on the 1st May, 1859, and as now sanctioned, 1st April, 1869.

	Monthly cost of Establishment.		*Annual cost of Establishment.*		*Length of the Customs' Line.*		*Total amount of collections, including double duty, &c.*		*Annual charge per mile of Line.*		*Annual charge per cent. on collections.*	
	On the 1st May, 1859.	As now sanctioned.	In 1859.	As now sanctioned.	On the 1st May, 1859.	On the 1st April, 1869.	From 1st May, 1858, to 30th April, 1859.	From 1st April, 1868, to 31st Mar., 1869.	In 1859.	In 1869.	In 1859.	In 1869.
	Rs.	Rs. As. P.	Rs.	Rs.			Rs.	Rs.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.
Sirsa, ...	5,883	8,192 0 0	70,596	98,304	117	126½	65,638	56,902	603 6 1	777 1 8	107 8 10	172 12 2
Hansie, ...	6,419	7,217 8 0	77,028	86,610	85	69½	13,78,207	17,44,930	906 3 4	1,246 3 0	5 9 5	4 15 5
Delhi, ...	11,121	12,325 0 0	1,33,452	1,47,900	103	96½	13,19,257	30,56,342	1,295 10 4	1,532 10 3	10 1 10	4 13 5
Total, ...	23,423	27,734 8 0	2,81,076	3,32,814	305	292½	27,63,102	48,58,174	921 9 0	1.137 13 2	10 2 9	6 13 7
Muttra, ...	5,597	6,640 10 0	67,164	79,687½	52½	52½	11,31,370	16,41,156	1,279 5 0	1,517 13 8	5 14 11	4 13 8
Agra, ...	9,633	12,016 2 0	1,15,596	1,44,193½	109½	105	18,07,317	32,62,323	1,055 10 8	1,373 4 3	6 6 4	4 6 8
Jhansie, ...	9,352	15,895 0 0	1,12,224	1,90,740	162½	172	1,31,468	3,13,963	691 10 9	1,108 15 3	85 5 9	60 12 0
Total, ...	24,582	34,551 12 0	2,94,984	4,14,621	324½	329½	30,70,155	52,17,442	909 11 10	1,258 5 4	9 6 5	7 15 1
Saugor, ...	7,738	10,010 0 0	92,856	1,20,120	115	139½	2,45,690	5,41,788	807 7 1	861 1 2	37 12 8	22 2 9
Hoshungabad, ...	7,097	7,401 0 0	85,164	88,812	163	286	85,415	1,06,151	522 3 4	310 8 6	99 11 3	83 10 7
Nagpore, ...	...	12,506 0 0	...	1,50,072	...	452½	...	6,99,652	...	331 10 5	...	21 7 2
Raipore, ...	...	3,914 0 0	...	46,968	...	268	...	2,09,681	...	175 4 0	...	22 6 4
Total, ...	14,835	33,831 0 0	1,78,020	4,05,972	278	1,146	3,31,105	15,57,272	640 5 9	354 4 0	53 12 2	26 1 0
Internal, N.-W. Provinces,... ...	...	13,818 0 0	...	1,65,816	...	...	...	81,294	...	...	...	203 15 6
Internal, Oudh,...	...	4,478 0 0	...	53,736	...	...	...	11,593	...	...	...	463 8 4
Total, ...	...	18,296 0 0	...	2,19,352	...	...	...	92,887	...	...	...	236 2 3
Grand Total, ...	62,840	1,14,413 4 0	7,54,080	13,72,959	907¼	1,768	61,64,362	1,17,25,775	831 2 9	652 7 10	12 3 8	11 11 4
Berar Line, ...	...	11,010 0 0	...	1,32,120	...	334	...	3,02,801	...	395 9 1	...	43 10 1

AGRA:
The 17th April, 1869.

ALLAN HUME,
Commissioner of Inland Customs.

D.

Comparative Statement of Cost of Mofussil Customs' Establishments, exclusive of Patrols, Assistant Patrols, Salt Establishment, and Stationery Charges, as it stood on the 1st May, 1859, and as now sanctioned, 1st April, 1869.

	Monthly cost of Establishment.		*Annual cost of Establishment.*		*Length of the Customs' Line.*		*Total amount of collections, including double duty, &c.*		*Annual charge per mile of Line.*		*Annual charge per cent. on collections.*	
	On the 1st May, 1859.	As now sanctioned.	In 1859.	As now sanctioned.	On the 1st May, 1859.	On the 1st April, 1869.	From 1st May, 1858, to 30th April, 1859.	From 1st April, 1868, to 31st March, 1869.	In 1859.	In 1869.	In 1859.	In 1869.
	Rs.	Rs.	Rs.	Rs.			Rs.	Rs.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.
Sirsa, ...	4,286	6,092	51,432	73,104	117	126½	65,638	56,902	439 9 5	577 14 4	78 5 8	128 7 6
Hansie, ...	5,045	5,507	60,540	66,084	85	69½	13,78,207	17,44,930	712 3 9	950 13 7	4 6 3	3 12 7
Delhi, ...	7,969	8,514	95,628	1,02,168	103	96½	13,19,257	30,56,342	928 6 10	1,058 11 9	7 3 11	3 5 5
Total, ...	17,300	20,113	2,07,600	2,41,356	305	292½	27,63,102	48,58,174	680 10 6	825 2 4	7 8 3	4 15 6
Muttra, ...	4,224	4,969	50,688	59,628	52½	52½	11,31,370	16,41,156	965 7 9	1,135 12 4	4 7 8	3 10 1
Agra, ...	6,033	8,973	72,396	1,07,676	109½	105	18,07,317	32,62,323	661 2 5	1,025 7 9	4 0 1	3 4 9
Jhansie, ...	7,391	13,135	88,692	1,57,620	162¼	172	1,31,468	3,13,963	546 10 2	916 6 3	67 7 4	50 3 3
Total, ...	17,648	27,077	2,11,776	3,24,924	324¼	329½	30,70,155	52,17,442	653 2 0	986 1 9	6 14 4	6 3 7
Saugor, ...	5,752	8,098	69,024	97,176	115	139½	2,45,690	5,41,788	600 3 4	696 9 9	28 1 6	17 14 11
Hoshungabad, ...	5,655	6,107	67,860	73,284	163	286	85,415	1,06,151	416 5 1	256 3 11	79 7 2	69 0 7
Nagpore, ...	...	9,769	...	1,17,228	...	452½	...	6,99,652	...	259 1 1	...	16 12 1
Raipore, ...	...	3,132	...	37,584	...	268	...	2,09,681	...	140 3 9	...	17 14 9
Total, ...	11,407	27,106	1,36,884	3,25,272	278	1146	3,31,105	15,57,272	492 6 3	283 13 3	41 5 5	20 14 2
Grand Total, ...	46,355	74,296	5,56,260	8,91,552	907¼	1768	61,64,362	1,16,32,888	613 2 0	504 4 4	9 0 4	7 10 7
Berar Line, ...	...	9,531	...	1,14,372	...	334	...	3,02,801	...	342 6 10	...	37 12 4

AGRA:
The 17th April, 1869.

ALLAN HUME,
Commissioner of Inland Customs.

E.

Statement showing the quantity of Goods seized on Head Loads, and the number of Head Load Salt Smugglers apprehended during the year 1868-69, *as compared with* 1867-68.

Customs' Houses.	*Salt.*				*Sugar.*				*Number of Head Load Salt Smugglers seized.*		Remarks.
	1868-69.		1867-68.		1868-69.		1867-68.				
	Number of Heads Loads.	Number of Maunds.	Number of Head Loads.	Number of Maunds.	Number of Head Loads.	Number of Maunds.	Number of Head Loads.	Number of Maunds.	1868-69.	1867-68.	
Sirsa, ...	160	248	157	151	3	1	12	2	48	1	
Hansie, ...	96	84	77	50	69	8	98	10	58	5	
Delhi, ...	199	165	159	90	219	20	474	37	142	81	
Total, ...	455	497	393	291	291	29	584	49	248	87	
Muttra, ...	263	109	182	108	18	5	16	4	189	169	
Agra, ...	243	89	185	85	27	9	34	12	236	101	
Jhansie, ...	641	267	292	160	9	2	8	2	871	466	
Total, ...	1,147	465	659	353	54	16	58	18	1,296	736	
Saugor, ...	1,831	1,211	2,127	1,120	...	...	...	...	430	259	
Hoshungabad, ...	193	114	174	86	1	...	...	...	194	119	
Nagpore, ...	72	20	157	20	1	...	2	...	86	157	
Raipore, ...	504	382	558	188	...	...	...	...	585	560	
Total, ...	2,600	1,727	3,016	1,414	2	...	2	...	1,295	1,095	
GRAND TOTAL, ...	4,202	2,689	4,068	2,058	347	45	644	67	2,839	1,918	
Berar Line, ...	124	21	10	3	...	...	...	...	140	10	

AGRA:
The 17th April, 1869.

ALLAN HUME,
Commissioner of Inland Customs.

Statement E.

F.

Statement of Cases of Seizures reported to the Revenue Commissioners, or otherwise disposed of by the Collectors of Customs in the North-Western Provinces, Punjab, and Central Provinces, for the year 1868-69.

Customs Houses.	Description and quantity of Goods seized.			Grounds of seizures and detail of Cases.			Total number of cases of seizures.	No. of Cases ordered by Collectors or Commissioner of Customs.		Total Number of cases disposed of by Collectors or Commissioner of Customs.	No. of Cases reported to Revenue Commissioner.			Total Number of cases reported to Revenue Commissioner.	No. of Cases in which Collectors' orders have been.			Total Number of cases decided by Revenue Commissioners.
	Salt.	Cotton.	Sugar.	Without Rowannahs.	In excess of Rowannahs.	Difference between goods and specification of Rowannahs.		For release.	For single or double duty.		For release.	For confiscation.	For single or double duty.		Confirmed.	Reversed.	Modified.	
	Mds. S. C.	Mds. S. C.	Mds. S. C.															
Sirsa, ...	576 6 9	...	543 3 2	162	36	2	200	..	...	...	...	142	58	200	200	...	...	200
Hansie, ...	122 12 12	...	49 37 5	163	12	...	175	...	...	...	...	68	107	175	175	...	...	175
Delhi, ...	1,146 23 8	...	744 6 10	448	124	...	572	6	...	6	...	246	320	566	566	...	...	566
Total, ...	1,845 2 13	...	1,337 7 1	773	172	2	947	6	...	6	...	456	485	941	941	...	...	941
Muttra, ...	345 18 3	...	589 20 8	198	89	...	287	3	...	3	...	128	156	284	284	...	...	284
Agra, ...	3,625 12 14	...	774 18 8	278	289	2	569	18	...	18	...	190	361	551	551	...	...	551
Jhansie, ...	415 27 13	...	312 21 4	661	120	...	781	3	5	8	...	532	241	773	773	...	...	773
Total, ...	4,406 18 14	...	1,676 20 4	1,137	498	2	1,637	24	5	29	...	850	758	1,608	1,608	...	...	1,608
Saugor, ...	1,360 32 6	...	470 24 8	810	58	...	868	4	...	4	...	684	180	864	862	...	2	864
Hoshungabad, ...	304 35 9	...	42 38 10	212	10	...	222	5	...	5	...	114	103	217	217	...	...	217
Nagpore, ...	973 19 4	...	11 35 4	115	11	...	126	18	13	31	...	31	64	95	94	.	1	95
Raipore, ...	2,112 11 4	...	...	439	15	...	454	8	...	8	...	171	275	446	446	...	...	446
Total, ...	4,751 18 7	...	525 18 6	1,576	94	...	1,670	35	13	48	...	1,000	622	1,622	1,619	...	3	1,622
Grand Total, ...	11,003 0 2	...	3,539 5 11	3,486	764	4	4,254	65	18	83	...	2,306	1,865	4,171	4,168	...	3	4,171
Berar Line, ...	402 5 14	...	...	171	...	...	171	5	3	8	...	54	109	163	150	...	13	163

AGRA:
The 17th April, 1869.

ALLAN HUME,
Commissioner of Inland Customs.

G.

Return showing the number of Persons committed for smuggling under Section 7, Act XIV. of 1843, *and the punishment awarded them during the year* 1868-69.

Customs' Houses.	NUMBER OF SMUGGLERS.					PUNISHED WITH FINE AND IMPRISONMENT IN CASE OF NON-PAYMENT OF FINE.											PUNISHED WITH IMPRISONMENT.						Remarks.
			Convicted.						Imprisonment in case of Non-payment of fine.								*With labor.*			*Without labor.*			
	Committed for trial.	Acquitted.	Head Load Salt Smugglers.	Other Smugglers.	Total.	Number fined.	Gross Fine.	Average Fine.	*With Labor.*			*Without Labor.*										
									Number of persons.	Gross Term.	Average Term.	Number of persons.	Gross Term.	Average Term.								
							Rs. As. P.	Rs. As. P.		Y. M. D.	M. D. H.		Y. M. D	M. D. H.									
Sirsa, ...	39	2	30	7	37	11	147 0 0	13 5 9	18	1 11 20	1 9 0	8	1 5 15	2 5 0	...	...	...	...	...	...	...	...	
Hansie, ...	37	4	26	7	33	24	375 11 6	15 10 6	9	1 5 28	3 29 0	...	...	...	...	...	...	...	...	...	...	...	
Delhi, ...	105	5	100	...	100	44	773 0 0	17 9 1	32	6 0 27	2 8 8	24	2 2 0	1 2 12	...	...	...	...	...	...	...	...	
Total, ...	181	11	156	14	170	79	1,295 11 6	16 6 5	59	9 6 15	1 28 5	32	3 7 15	1 10 18	...	...	...	...	...	...	...	...	
Muttra, ...	*76	5	69	...	69	31	490 0 0	15 12 10	20	2 3 26	1 11 0	16	1 8 3	1 8 0	...	...	...	2	0 0 14	0 7 0			
Agra, ...	93	9	82	2	84	55	660 8 0	12 0 0	27	3 0 25	1 10 22	2	0 1 0	0 15 0	...	...	...	...	...	...			
Jhansie, ...	†264	11	221	23	244	69	525 7 8	7 9 9	174	23 5 10	1 18 10	...	...	...	...	...	...	1	0 0 2	0 2 0			
Total, ...	‡433	25	372	25	*a*397	155	1,675 15 8	10 13 0	221	28 10 1	1 16 23	18	1 9 3	1 5 4	...	...	...	3	0 0 16	0 5 8			
Saugor, ...	485	7	416	62	478	261	4,093 8 0	15 10 11	58	12 1 0	2 15 0	139	9 6 13	0 24 17	1	0 2 0	2 0 0	19	0 10 25	0 17 2			
Hoshungabad, ...	86	1	55	30	85	78	1,094 0 0	13 14 4	5	0 3 20	0 22 0	2	0 1 10	0 20 0	...	...	...	...	...	...			
Nagpore, ...	44	...	29	15	44	44	287 0 0	6 8 4	...	...	...	...	...	...	...	...	...	...	...	...			
Raipore, ...	§297	16	225	50	275	266	1,563 12 0	5 14 0	8	0 2 10	0 8 18	1	0 0 7	0 7 0	...	...	...	...	...	...			
Total, ...	*b*912	24	725	157	*882	649	7,038 4 0	10 13 4	71	12 7 0	2 3 19	142	9 8 0	0 24 12	1	0 2 0	2 0 0	19	0 10 25	0 17 2			
Grand Total, ...	*c*1,526	60	1,253	196	*c*1,449	883	10,009 15 2	11 5 4	351	50 11 16	1 22 6	192	15 0 18	0 28 5	1	0 2 0	2 0 0	22	0 11 11	0 15 12			
Berar, ...	58	21	18	19	37	32	313 0 0	9 12 6	1	0 0 15	0 15 0	...	...	...	...	...	...	4	0 2 0	0 15 0			

a This includes two Smugglers of 1867-68.

b This includes one of 1867-68.

c This includes six cases of 1867-68.

* Magistrate's decision not received in regard to two Smugglers.
† One smuggler punished with 10 lashes only.
‡ Courts' decision for eight Smugglers not yet communicated.
§ No final orders have been communicated with regard to six Smugglers.

Agra:
The 17th April, 1869.

ALLAN HUME,
Commissioner of Inland Customs.

Statement G.

Comparative Statement of the quantity of various kinds of Salt imported across the entire Line of Customs during the official years 1867-68 *and* 1868-69.

	1868-69.		1867-68.		*Increase.*		*Decrease.*	
	Quantity.	Duty.	Quantity.	Duty.	Quantity.	Duty.	Quantity.	Duty.
	Mds. S. C.	Rs. As. P.	Mds. S. C.	Rs. As. P.	Mds. S. C.	Rs. As. P.	Mds. S. C.	Rs. As. P.
Sambhur, ...	6,06,298 9 3	18,18,895 13 0	6,25,777 26 14	18,77,334 10 9	...	...	19,479 17 11	58,438 13 9
Balumbha, ...	11,74,317 10 9	35,22,953 7 10	10,59,241 31 2	31,77,726 9 9	1,15,075 19 7	3,45,226 14 1	...	...
Salumbha, ...	2,47,548 19 8	7,42,645 0 6	2,10,463 1 7½	6,31,389 3 2	37,085 18 0½	1,11,255 13 4	...	...
Sooltanpooree, ...	7,07,329 17 5	21,21,988 6 2	7,33,695 18 14	22,01,086 7 2	...	...	26,366 1 9	79,098 1 0
Deedwana, ...	2,93,531 31 3	8,80,595 11 10	3,04,291 14 10	9,12,874 2 5	...	...	10,759 23 7	32,278 6 7
Phullowdee, ...	2,951 15 0	8,854 2 11	4,281 5 8	12,843 7 5	...	...	1,329 30 8	3,989 4 6
Kharee, ...	942 7 9	2,777 8 10	1,768 8 9	5,158 8 0	...	...	826 1 0	2,380 15 2
Black, ...	4,399 23 2	13,198 11 10	4,228 33 10	12,686 8 6	170 29 8	512 3 4	...	...
Kansia, ...	1,47,304 10 0	4,41,916 11 6	2,41,454 12 12	7,24,365 13 0	...	...	94,150 2 12	2,82,449 1 6
Kansia Sambhur, &c. (mixed),... ...	2,429 38 15	7,290 1 10	1,712 29 2	5,138 3 7	717 9 13	2,151 14 3	...	...
Bhooshkie, ...	1,223 20 2	3,670 8 9	2,388 9 9	7,164 12 10	...	...	1,164 29 7	3,494 4 1
Kokun, ...	4,45,520 3 10	6,68,293 4 6	3,64,244 27 14	5,46,367 13 1	81,275 23 0	1,21,925 7 5	...	...
Chooteea, ...	8 15 4	25 2 5	25 7 12	75 10 0	...	...	16 32 8	50 7 7
Putchbuddra, ...	26 20 0	79 8 0	75 20 0	226 8 0	...	...	49 0 0	147 0 0
Saindha, ...	...	...	3 19 0	10 6 11	...	...	3 19 0	10 6 11
Russee mittee, ...	19 28 14	58 11 4	11 18 8	34 6 2	8 10 6	24 5 2	...	...
Salt in saltpetre, ...	22 20 4	67 8 8	28 24 10½	85 13 7	...	...	6 4 6½	18 4 11
Burragura, ...	1,466 16 0	4,399 3 7	3,193 35 1	6,026 10 4	...	...	1,727 19 1	1,627 6 9
Mutteea, ...	...	...	0 7 12	0 9 4	...	...	0 7 12	0 9 4
Bunwar, ...	1,32,184 8 9	1,98,277 4 9	1,81,907 34 9	2,72,862 7 3	...	...	49,723 26 0	74,585 2 6
Rewasa, ...	27 0 0	81 0 0	28 0 0	84 0 0	...	...	1 0 0	3 0 0
Ummer Bailee, ...	57 0 0	85 8 0	...	...	57 0 0	85 8 0	...	...
Ganjam, ...	988 29 4	1,483 1 6	...	...	988 29 4	1,483 1 6	...	...
Salt Papur and Sujjee Khar, ...	10 15 0	31 2 1	...	...	10 15 0	31 2 1	...	...
Itchapore Salt, ...	1,729 28 6	2,594 9 7	...	...	1,729 28 6	2,594 9 7	...	...
Total, ...	37,70,336 27 11	104,40,262 5 5	37,38,821 27 4	1,03,93,542 11 3	2,37,118 22 12½	5,85,290 14 9	2,05,603 15 1½	5,38,571 4 7

AGRA:
The 17th April, 1869.

ALLAN HUME,
Commissioner of Inland Customs.

APPENDIX I.

Review of the Administration of the Internal Department of the Inland Customs, North-Western Provinces' Section, for the Official Year 1868-69.

INTERNAL DEPT., N.-W. P. Internal economy.

1. The area affected by the operations of this branch of the Inland Customs has undergone no modification since the last Report was written. It remains, as then, a space of 61,895 square miles, with a population of about 27,000,000 souls. The Departmental executive has, however, received, under recent sanction of the Government of India, a small accession of strength, and now stands at 883* officers and men. The superior officer, formerly styled Inspector, has now the rank of Assistant Commissioner.

Increase of force.

FINANCIAL RESULTS. GROSS REALIZATIONS. Decrease as compared with those of 1867-68.

2. Receipts of 1868-69, from all sources, amount to Rs. 80,790-0-6, against Rs. 87,033-13-6 of 1867-68, or a decrease of Rs. 6,243-13-0, or 7·17 per cent.

3. The following table presents details of realization under each heading in comparison with the preceding official year, and with the two preceding corresponding twelve-monthly periods.

Year.	Fees on Licenses.			Fines and Confiscations.			Duty on Salt.			Total.		
	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.
1868-69, ...	45,387	0	0	568	0	1	34,835	0	5	80,790	0	6
1867-68, ...	50,843	0	0	261	5	11	35,929	7	7	87,033	13	6
Corresponding 12 months of 1866-67, ...	42,548	4	0	398	1	11	57,191	5	5	1,00,137	11	4
Ditto 1865-66, ...	36,509	0	0	367	2	4	69,013	12	2	1,05,889	14	6

COLLECTIONS. Analysed month by month.

4. In annexure A. is presented a *résumé* of collections, under the above headings, showing the income, month by month, for the current official year, and for that immediately preceding. This form shows that in the first quarter there was a steady decrease; that in the month of July the loss lessened; that in the four months following, the tendency was towards increase; and that in the concluding four months deficit and surplus alternated, until the year ended with an increase (month against month) exceeding all monthly decreases, except that with which the year commenced.

Collections by circles.

5. Annexure B. gives the collections for these two latter years in each circle. Four only—Allygurh, Mynpoorie, Ghazeepore, and Goruckpore—show increased realizations, and these increases are but inconsiderable. On the other hand, there is but one large falling-off, *viz.*, in Futtehpore, where the loss is Rs. 4,758, or more than three-quarters (76·21 per cent.) of the whole year's decrease.

Detail of salt destroyed.

6. Annexure C. contains the particulars of salt destroyed as too impure for sale. In the year under review, 371 maunds 29 seers 10 chittacks, were thus disposed of; being equivalent to Rs. 1,115-3-0 duty.

* Exclusive of the Deputy Commissioner, Assistant Commissioner, and their Offices, and of 135 Mooshriffs, or Excise Agents. The figures in the text represent the purely *preventive* agency.

Chronic decline of income,

7. The income of this branch, as may be seen in the table attached to paragraph 3, has long been in a chronic condition of decline. It reached its climax in the official year 1864-65 (old style), during much of which refined saltpetre fetched Rs. 7-14-0, and even Rs. 8, in Calcutta; when, realizing Rs. 1,53,217, it came near to paying all internal preventive expenses, leaving but Rs. 1,759 per mensem to be provided by the State. From that time, however, it has receded, *pari passu*, with the progress towards extinction of the Indian saltpetre export trade. But now, in the year under report, our realizations have begun to feel the effect of its somewhat more prosperous condition. Early in the year, as prices in Calcutta, after showing an upward tendency, sank to the very minimum of the foregoing twelve-months, our receipts, as duty on salt (the first item which such fluctuations affect, for the reaction upon license-fees takes longer to be sensible) went steadily, as reference to Appendix A. will show, downwards. This lasted until decided trade-reaction set in at Calcutta in September, when our income thenceforward improved until February, when, from causes distributed over too wide an area to be with certainty definable, a slight falling-off, comparing month with month, (Rs. 334) was apparent. But in February, Calcutta export prices had reached their maximum, and the influence showed itself in March, when our receipts as duty were 228·55 per cent. beyond those of March, 1868, and higher than anything realized under that heading in the thirty-four months preceding. These remarks confirm the conclusion, already so often urged upon and accepted by Government, that the ability of this special branch of the Inland Customs to contribute towards its own expenses, depends absolutely and without appeal on the condition of the saltpetre export trade.

which reached its highest point in 1864-65,

fluctuating with exports of saltpetre.

Fluctuations of the year.

Terminating with a certain increase.

Confirmation of adopted views on causes of decline.

Analysis of receipts.

Percentages of decrease and increase.

8. Analyzing the receipts of the year, license-fees are Rs. 5,456, or 10·73 per cent.; duty on salt, Rs. 1,094, or 3·04 per cent., below those of 1867-68. In the item of fines and confiscations, there is an increase of Rs. 306, or 117·20 per cent., which leaves the final decrease at Rs. 6,243, or 7·17 per cent., below those of the preceding year. It may be noted, that during the last six months of the year under report, the receipts as duty on salt were 42 per cent. in excess of those for the corresponding months of 1867-68.*

Large increase in duty on salt during last six months.

Decrease in license-fees.

Causes.

9. The loss on fees is chiefly due to our refusals to license localities abounding in, or adjoining on, soil yielding alimentary salt, or in which seizures were effected during the preceding year, and to the difference in issue of licenses for a particular class of works (for production of carbonate of soda or sujjee), a probability of slackness in respect to which was indicated in paragraph 37 of last year's Report.

In duty on salt.

Cause.

10. As will have been rendered apparent by what has been said in paragraph 7, the small loss in duty on salt has arisen out of unusual depression in saltpetre exports, during the first five months of the year.

Fines and confiscations are of small account.

11. Fines and confiscations never assume such dimensions as to exercise a sensible influence on the income of the year. In the present instance, although the *percentage* of increase is high, the *sum* itself is trifling. The increase is caused by inclusion of a sum of Rs. 439-11-5, seizure-shares appertaining to men of the establishment dismissed for collusion, which were carried to credit of Government.

CHARGES.

Compared with those of three preceding years.

12. The charges of the year amount to Rs. 1,77,792-13-11, details of which, as also of the three preceding twelve months, are embodied in the following table:—

* Had the first six months been equally prosperous, we should, at that rate, have added Rs. 14,634 to our income, which would then have been Rs. 95,424.

Year.	Fixed.				Contingencies.								
	Supervision.	*Prevention.*											
	Deputy Commissioner, Assistant Commissioner, and Office.	Officers, Deputy Inspectors, and Sub-Deputy Inspectors.	Men.	Total of Fixed.	Travelling Allowance, other than that fixed for Deputy Inspectors.	Conveyance of weighing apparatus.	Pay of Peons sick in Hospital.	Postage Labels.	Dieting of Prisoners.	Half fines as per sentences of Courts.	Miscellaneous.	Total of Contingencies.	Grand Total of Charges.
1868-69, ...	32,109 10 9	57,512 0 0	70,033 9 7	1,59,655 4 4	1,611 9 10	1,380 5 5	51 12 2	2,943 9 6	31 14 9	1,270 15 2	10,847 6 9	18,137 9 7	1,77,792 13 11
1867-68, ...	29,841 11 8	51,954 9 11	66,463 10 5	1,48,260 0 0	810 8 3	838 14 9	...	2,690 8 0	61 1 6	939 9 5	2,880 5 2	8,220 15 1	1,56,480 15 1
Corresponding twelve months of 1866-67, ...	29,596 5 6	47,993 9 8	71,400 0 6	1,48,989 15 8	869 10 8	628 11 8	...	1,694 4 6	154 1 9	972 0 6	2,358 2 2	6,676 15 3	1,55,666 14 11
Ditto ditto of 1865-66, ...	28,130 3 7	46,888 2 3	79,287 6 7	1,54,305 12 5	1,582 15 2	605 10 7	...	...	32 0 9	8,712 8 7	4,828 9 7	15,761 12 8	1,70,067 9 1

Results of comparison.

charges, in the year under review have exceeded those of the year immediately preceding, by Rs. 21,311-14-10, or 13·61 per cent.; out of which, Rs. 11,395-4-4, or 7·28 per cent., are debitable to fixed expenditure, and Rs. 9,916-10-6,or 6·33 per cent., to contingencies.

Percentages on gross outlay of 1867-68.

Fixed charges compared. *Percentages.*

13. The addition to fixed charges (7·68 per cent. on the corresponding item in 1867-68) is attributable entirely to the higher scale of salaries recently sanctioned.

Contingent charges compared. *Percentages.*

14. The increase in contingencies is large, amounting to Rs. 9,916-10-6, or 120·63 per cent., on the same item in the earlier year. In travelling allowances, there are Rs. 801-1-7 more than last year, traceable to unusual movement of officers of different grades, all in the interest and necessitated by the demands of the service. Conveyance of weighing apparatus has cost Rs. 541-6-8 additional. This item, swelled also materially by the growing dearness of carriage—follows in the wake of travelling charges, and is, indeed, their natural pendant. Salaries of sick subordinates, while in hospital, are a charge now for the first time brought into account, and add their total, Rs. 51-12-2, to the year's increased cost. Postage labels cost Rs. 253-1-6 more than in 1867-68, for not only has there been more correspondence than usual, but there have been expensive despatches of printed documents, aiding to swell the outlay. The item is one in which it is difficult to economize, for the greater the demands on any office, or group of offices, the faster its correspondence will increase. In shares of fines, there is an increase of Rs. 331-5-9, due to the more liberal allotment of rewards under recent sanction. But the largest addition is in the heading miscellaneous, amounting to Rs. 7,967-1-7. Of this, Rs. 7,694 are due to provision of public tents, by authority of Government, for all superior officers of the Internal Branch. This reduces the increase under this particular heading to Rs. 273-1-7. In one item only, dieting of prisoners, is a decrease of Rs. 29-2-9, due to fortuitous causes. If this latter sum be deducted from the aggregate of increases above detailed (leaving out the sum of Rs. 273-1-7), the result will be seen to be Rs. 9,916-10-6, already given as the total of the year's increased contingent outlay.

Increase in travelling allowances.

Do. in conveyance of weighing gear.

Increase in pay of men in hospital.

Do. in postages.

Difficulty of controlling this item.

Increase in fine shares.

Increase in miscellaneous,

mainly due to provision of tents,

leaving a very small balance of real increase.

Deducting cost of tents, contingent chargesare reduced to an increase of 27·03 *per cent.*

15. Leaving out the cost of tents, a special item, which ought, in fact, to be spread over at the very least four years (and the tents will probably be made to last six or seven), the contingent charges proper to the year will be found to be but Rs. 2,222-10-6, or 27·03 per cent., in excess of those of its predecessor.

Comparison of charges of 1868-69 with 1866-67 and 1865-66. Fixed. *Percentages by which* 1868-69 *exceeds those of the two years. Cause.*

16. Looking back over the preceding years 1866-67 and 1867-68, it will be seen that the fixed charges of 1868-69 are Rs. 10,725-4-8, or 7·19 per cent., in excess of the former, and Rs. 5,349-7-11, or 3·46 per cent., above those of the latter. The cause why these years, and more especially the latter of the two, come nearer in their outlay for fixed items to the expenditure of the year under review, is that in both, but again principally in the earlier (1865-66), more licensed refineries of saltpetre were at work, entailing a larger expenditure on mooshriffs than in 1867-68.

Contingencies of 1865-66, *artificially increased.*

17. As regards contingencies of these two earlier years, 1865-66 alone calls for remark, with respect to the nearness of its approach to the figures of that now reported on. The approximation is, however, apparent rather than real. For purpose of comparison, a series of months corresponding to those which now form the official year, has had to be taken, and it so happens that in April, 1865, when the post-audit system still obtained, the contingent bills of four preceding months were paid in one, which, of course, greatly adds to the total of the year in which, under existing conditions, the month has now to be included. In the next Annual Report the figures of 1865-66 will not come in question.

NET EXPENDITURE.

18. It remains to show the relation which expenditure and realization bear to each other in the Internal Branch. Figures for the series of years, given in foregoing tables, are therefore compared in that which follows:—

YEAR.	Gross Expenditure.	Realizations.	Net Expenditure.	Net Expenditure per Mensem.	Percentage of gross Expenditure on Income.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
1868-69, ...	1,77,792 13 11	80,790 0 6	97,002 13 5	8,083 9 1	220·07
1867-68, ...	1,56,480 15 1	87,033 13 6	69,447 1 7	5,787 4 1	179·79
Corresponding 12 months of 1866-67, ...	1,55,666 14 11	1,00,137 11 4	55,529 3 7	4,627 6 11	155·45
Ditto ditto of 1865-66, ...	1,70,067 9 1	1,05,889 14 6	64,177 10 7	5,348 2 2	160·60

Compared with that of three years preceding;

19. It will be seen that, with on one hand an increased expenditure, and on the other a diminished income (the causes of both conditions having already been explained), the internal operations of the Inland Customs have cost, during 1868-69, more than in any year with which comparison is here made. It may not be amiss to note, that had we not been obliged to concentrate into this year, the expenditure of several in providing tents, the want of which placed our officers at disadvantage, both of expense and comfort, as compared with their contemporaries and equals in status in any other branch of the public service, the expenditure of the year, which is now represented by Rs. 8,083 per mensem, might have been Rs. 7,442, but a very trifle (Rs. 195) above the sum (Rs. 7,247) fomerly paid for an establishment totally inefficient.

greatest in 1868-69,

but accidentally heightened,

PECULIAR POSITION OF INTERNAL BRANCH.

20. In a report of this nature, it can never be inappropriate briefly to recall attention to the very peculiar position and functions of the branch supervised by this Office. Its functions are to keep down the illicit manufacture of salt, in all of its many forms, and to regulate and derive revenue from the legalized production of salt in connection with the refining of saltpetre. The very fair prospect with which, in 1861, it began to work, of being able not merely to pay all its own costs, but to add a surplus to the general income of the department, has been falsified by operation of causes totally beyond the control of those connected with its administration, causes foreseen and foretold by this Office, and which worked exactly to the result by it predicted. The direct revenue which it has been enabled to bring in, has thus never been important, has, in fact, never quite come up to its outlay; and under the pressure of the same external cause (decadence of saltpetre trade under the rivalry of a scientific production in Europe), that revenue has, until within the last very few months, continued steadily to fall lower and and lower. But, as is well known, the pecuniary returns of this Office are no criterion whatever of the value of its establishments. The real use, then, of the Branch is not as an agency of receipt, but in its character of an agency of insurance against losses, impossible to calculate with nicety, but difficult to overrate. Its executives keep watch over thousands of square miles of ground teeming with sources of salt, holding tracts so saline, that in places their mere spontaneous efflorescence lies fit for alimentary use, whose populations count by hundreds of thousands, castes to whom manufacture of salt is an hereditary trade (not forgetting that, from Brahmin to Dome, any Hindoo may make salt without caste defilement). Solely by means of those executives are these vast opportunities not largely turned to the detriment of the State revenue; and it is in this, the preventive function, that the true value of the Internal Department of the Inland Customs consists. Ninety-six lakhs of rupees are about the worth of the interest which it helps to assure, and on that sum the net cost of the internal arrangements, during 1868-69, represents a premium of 1·01 per cent.* This brief dissertation, on

ITS FIRST PROSPECT

how frustrated.

Real uses of the Establishment.

it cost as an agency of assurance.

* Without the purchase of tents, which, albeit a most needful outlay, does add a kind of false weight to our expenses of the year, this percentage would have been 0·93.

Apology for digression.

points already very familiar to the Board of Revenue and to the Government of the North-Western Provinces, has been ventured on, in the hope of making reference to past correspondence unnecessary, by rendering the present Report as complete on all matter within its scope, as possible. The importance to the Department at large of a clear understanding and constant recollection of these particular points, will be self-apparent.

ISSUE OF LICENSES.

21. Annexure D. shows the issue of licenses, and their increase or decrease, in every kind, together with the sums which each have yielded as fees. The

CRUDE SALTPETRE WORKS: Increase.

principal features therein observable are, an increase in crude saltpetre works, traceable to that, probably but temporary, revival of export alluded to in paragraph 7,—5,012 having issued in 1868-69, against 3,634 (an increase of 1,378) in 1867-68;

Sujjee works: *decrease.*

a very marked decrease, not altogether unexpected, in sujjee (carbonate of soda) factories, 760 being at work in the former, against 2,212 in the latter (a decrease

Russee works: *increase.*

of 1,452); an unimportant fluctuation in russee works (another form of impure carbonate of soda), 264 having worked in 1868-69, against 245 in 1867-68 (in-

Kharee works: *decrease.*

crease of 19); a decrease in kharee works principally due to our refusals to license, 1,044 having been open in 1868-69, against 1,298 in 1867-68 (decrease

Saltpetre Refineries: *Increase.*

of 254); and an increase in the number of saltpetre refineries, 145 in 1868-69, against 127 in 1867-68 (increase of 18).

Crude factories worked by artificial and by solar heat.

22. Of the crude saltpetre works, 4,364 have worked by "jurreeah," or artificial heat, and 608 by "abee," or solar evaporation.*

ISSUE BY CIRCLES:

23. Annexure E. gives details of issue of licenses in every circle, and increase or decrease of every kind of licensed work in each. In crude saltpetre

Increase or decrease

works, the greatest increases have been in the following, *viz.*, Goruckpore, increase 426; Ghazeepore, ditto, 362; Furruckabad, ditto, 176; Allygurh, ditto, 171;

where principally occurring.

Agra and Jounpore, ditto, 116 each. In sujjee works, the heaviest decreases have fallen in Jounpore, *viz.* 1,234, and Ghazeepore, *viz.* 229, less than in 1867-68. In kharee works, the only large decrease is in Cawnpore, *viz.* 262. The increase in refineries is pretty evenly spread over the entire jurisdiction.

LICENSES REFUSED.

24. Annexure F. shows how many licenses have been refused during the year. In paragraph 15 of the last Annual Report of this Office, a considerable in-

increase of refusals predicted in last Annual Report.

crease of refusals to license was predicted. Our principle has been to refuse licenses wherever, during the foregoing year, seizures have been effected. Then there have been refusals to license localities, the soil of which was saline, or in the close neighbourhood of which such tracts existed. The consequence is, that in

Actual results.

1868-69 we have refused 773 applications, against 168 in 1867-68. Of the refusals in 1868-69, 520 have been on account of seizures effected during the previous year; 232 on account of proximity of saline tracts, and 21 for other causes, such as isolation, rendering supervision difficult, immature age of the ostensible applicant, inability to discover the village for which a license was demanded, &c.

Doubts as to the policy of refusal;

Now, refusal to license is a very heavy punishment, and it is open to question whether, during the year reported on, the process has not been carried too far;

although, in certain cases, the only effectual resource.

although where kharee (sulphate of soda) works are concerned, this is, as the law and our means stand, about the only effectual weapon we possess.

With a reviving trade in saltpetre, *relaxation will be prudent.*

The question is, is not its effect too searching and too far-reaching? I confess to misgivings on this head, and just now, with distinct signs of tendency to revive in the saltpetre trade, hold it very expedient to relax the stringency of our new process. Hitherto the *modus operandi* has been this. The officer in charge

How refusals are regulated.

of the circle, guided by Circular of this Office, which laid down the conditions noted below,† or by rule 23 of the G. O. No. 247A., of the 15th November, 1861,

* Forty duplicate licenses issued, for originals lost or destroyed.

† Licenses to be usually refused whenever a seizure has been effected during the previous official year. This condition applies to the locality as well as to the individual. Refusals to be permanent, *i. e.*, not to be rescinded without the consent of this Office.

which authorizes refusals where the outturn of a crude saltpetre works is likely to be less than five maunds, or whenever the neighbourhood of tracts yielding pure alimentary salt may render the applicant's motive open to suspicion, refused a license, sending, at the end of each month, to this Office an abstract of his reasons in each case. Now, where the fact of a seizure having occurred has been the motive, the case was always clear enough, and the principle laid down was acted on. In others, it is mostly advisable to rely on the local authority, who is much better placed for accurately estimating the facts than the Head of this Office, who must usually judge by written record, and whose other important duties often take him to distances at which he has no choice but to trust to the discretion of his subordinate, always, be it remembered, a picked English Officer. And it still seems to me impracticable to lay down a rule acting in the contrary direction, and binding our officers to issue licenses against their own conviction. What it now seems best to do, is to make such a redistribution of force as shall increase our strength where danger is confessedly greatest, and then not adhere rigidly to the rule of refusing a license wherever a seizure has occurred within the year preceding. These highly desirable local reinforcements are discussed in paragraphs 71 and 72, and the chances are that relaxation will entail little risk. It is certain that these refusals to license have let in a new light upon the owners of works and of land. Fines may be clubbed for, or a profit and loss account kept of the proceeds of the time when vigilance has been outwitted, against the damages resulting from being found out; but there is no standing up against the crushing weight of the blank refusal to allow manufacture to proceed, and my own feeling is, that those who have once felt the power of this remedy will be cautious how they put themselves in its way a second time.

Local Officials must usually be relied on.

Remedy under consideration.

25. In judging of the stringency exercised in the matter of refusals to license, it should not be forgotten that the Line revenue had been in an unsettled condition, and that, in quarters which might easily have been well informed, a prevalence of illicit manufacture of salt within our territory was assigned as a principal cause of depression. However unwilling to credit this history, however strong our personal conviction of its instability, the fact that men with money at stake in the duty-paying trade believed and spread such a rumour, made it our duty to be more vigilant and more rigid than in times when no such disquieting influence existed. Then, too, there were the discoveries in Mynpoorie, described in paragraph 17 of the last Annual Report, where seizures of nearly four hundred maunds of salt had shown how likely lapse from suspicious vigilance was to be followed by wholesale fraud.

Incentive to stringency.

Recently prevalent.
rumours
in mercantile circles.

26. Annexure G. shows the number of persons seized and committed during the year for working without licenses. There is no such marked increase as would lead to the inference that our refusals to license had led to any general determination to work in open violation of rule. In many cases, where we find that ignorance or inadvertence may be assumed, we content ourselves with issuing a license, and letting the parties concerned work on. In others, which now, when the law has grown old and is well known, form the majority, we are obliged to prosecute. Out of 159 persons, seized on this account in 1867-68, we prosecuted 105, or 66·03 per cent., and in 1868-69, out of 178, have proceeded against 129, or 72·47 per cent. But there is still a notable decrease in cases of this nature, as compared with 1866-67, in which we seized 317, and prosecuted 230 persons; figures respectively 43·84, and 43·91 per cent. above those for the year now reviewed.

CASES OF WORKING WITHOUT LICENSE.

Increase in 1868-69
not very marked.

Percentages of persons prosecuted in 1867-68 *and* 1868-69.

Latter year still falls far below 1866-67.

27. Illicit manufacture of salt has shown no symtoms of increase during the year under report. Turning to the detail of seizures, given in the first of the tables appended to paragraph 30, it will be apparent that there has been a general falling-off, comparing one year with another, in the annual table of seizures,

ILLICIT MANUFACTURE OF SALT not apparently increasing.

and that in no circle has any very considerable amount of salt been seized. The largest aggregate during the year, has been 81 maunds 21 seers, in the Allygurh Circle, but this is not even equal to 25 per cent. on the really large quantity (377 maunds) seized in the Mynpoorie Circle, in May and June of 1867, when, for a few weeks, we stood in danger of seeing illicit manufacture assume formidable proportions. It is specially to be dreaded in the following circles, *viz.*, in Agra, where there are rich salt lands; in Allygurh, which has large kharee (sulphate of soda) works, the most formidable of our difficulties, and which have turned, and are likely to turn out, beyond any question, a great deal more salt than we have ever succeeded in capturing; in Boolundshuhur, where, but for the constant presence of our patrolling parties, the great Ghazeeabad salt deposits would supply half the country within twenty miles; in Budaon, where, on the Ganges, there are again some of our special enemies, the kharee (sulphate of soda) makers; in Mynpoorie, which gave us a fair specimen of its powers in 1866-67; in Cawnpore, which contains some of the largest kharee lands in the North-West; in Allahabad, where there is much salt and kharee soil; and in Jounpore, where salt lands abound. There is, perhaps, not a district in the North-West where some salt may not be made, but the Customs Circles herein specified are those where the danger is great, where, without special measures of repression, many lakhs of maunds of good salt could be turned out every year, without any necessity for *ostensibly* breaking the law which prohibits manufacture of salt without special authorization of Government. The makers of crude saltpetre and sulphate of soda, the residents in saliferous tracts, have all their own patents for making salt unostentatiously and *cheaply*. We have recently heard of a device on the part of the sulphate of soda makers, vouched for by one of their own class who was unaware that the person with whom he was conversing was an officer of Customs, sufficiently curious to merit notice here. According to this person, now a resident in Rampore territory, it is not uncommon, in preparing a "kyaree" (the broad, shallow space in which crystallization is conducted by solar heat), to dig in its bed a pit, the mouth of which is boarded over, and levelled with the surface of the crystallizing square. From time to time the square is drained, the mouth of the pit opened, and such salt as there has been opportunity to make is stored therein. It is always easy to run brine from one square to another, and once the particular square is flooded, the most suspicious and keen-eyed of Customs detectives is baffled. When the rains are down, and visits of our parties rare, these hidden stocks, come into use. The story wants confirmation, but is being looked into, and by the end of these rains, we shall know if there is anything in it.

The largest seizures of the year *small as compared with some of* 1867-68, *when, for a time, real danger began.*

Circles in which most danger exists.

Ingenious device *attributed to owners of kharee works.*

28. The Noonneah or Loonneah caste are the principal workers in saline substances, but their monopoly of these industries, licit or illicit, is by no means absolute.* The Lodha, the Bind, the Kewut, the Mullah, the Chumar, and divers others in minor degree, all have their share; while as for manufacture of salt in the interior of houses, it is known to be practised, in very saliferous neighbourhoods, by every caste from the Brahmin downwards. I have personally, as an executive officer, assisted at seizures in houses of this latter caste.

Castes principally addicted to illicit manufacture.

29. Beyond maintenance of the existing force, no special measures appear requisite for further repression of illicit manufacture. Special legislation in respect to the sulphate of soda works, which has seemed desirable, and which has frequently been recommended by this Office, does not appear to be in consonance with the intentions of Government, and the matter needs not, therefore, to be again discussed.

No additional means needed for suppression.

* In 1868-69, out of 7,036 various licenses, 5,421 were held by Noonneahs, 449 by Binds, 290 by Chumars, 249 by Kewuts, 126 by Koormees, 104 by Munhars, 62 by Mussulmans, 61 by Lodhas, 57 by Rajpoots, 10 by Brahmins, the remainder, in groups of from 9 to 1, by divers other castes.

30. The penal action of the Department for the enforcement of the Customs' laws in the Internal Branch, is epitomized in the following tables, which exhibit results for the series of twelve months taken for retrospect of realizations and expenditure :—

Name of Circle.	Cases of Seizure.				Quantity of Salt.				Men Seized.			
	1865-66.	1866-67.	1867-68.	1868-69.	1865-66.	1866-67.	1867-68.	1868-69.	1865-66.	1866-67.	1867-68.	1868-69.
					Mds. S. C.	Mds. S. C.	Mds. S. C.	Mds. S. C.				
Agra, ...	22	13	8	11	2 34 15	0 20 6	3 15 15	11 23 12	88	56	26	45
Allygurh, ...	68	58	24	26	102 26 15	97 34 5	76 34 0	81 21 5½	345	243	105	71
Bolundshuhur, ...	34	31	11	1	39 18 15½	34 3 9	9 1 10½	13 30 0	108	92	13	1
Budaon, ...	34	43	16	17	16 6 6½	2 19 5	1 2 10½	2 28 14	66	97	20	23
Mynpoorie, ...	86	71	49	57	18 8 2	31 28 8½	377 1 5½	13 39 5½	256	226	238	96
Furruckabad, ...	88	75	32	41	47 37 12	36 9 10	6 39 9½	5 17 9	191	160	50	62
Cawnpore, ...	110	79	79	57	28 31 7	15 22 5	18 0 4	57 12 15	281	297	275	188
Allahabad, ...	188	160	107	98	20 26 7	22 1 12	5 3 15	15 9 10	583	367	180	235
Banda, ...	18	31	18	3	1 25 0	0 10 6	0 8 1	0 20 8	33	44	23	5
Joumpore, ...	161	223	148	183	29 12 12	22 25 6	12 27 9	23 2 13½	815	988	471	489
Ghazeepore, ...	169	168	106	95	2 5 4	5 38 6	3 21 13	4 39 7	348	269	130	135
Gorucknore, ...	80	63	25	20	1 26 9	0 36 8	0 13 5	0 18 5½	85	83	25	21
Total, ...	1,058	1,015	623	609	311 20 9	270 10 6½	514 10 2	230 24 9	3,199	2,922	1,551	1,371

Falling off in seizures.

31. The first prominent feature in the preceding table is the decline of seizures; and as the number goes on decreasing year by year, not falling in one year, and growing up again in another, but steadily, year by year, abating, it may be held to be symptomatic of a real gradual diminution of illicit manufacture. It is not pretended that these figures show the height and depth, length and breadth, of this illicit industry; or that we have detected every person, or *nearly* every one, who, during the years epitomized in the table, has broken the Customs' Laws. Far from this, we admit without much regret, that we punish but few of these who do so: to go beyond what we achieve would require a law more stringent than the Heads, at least, of this Department, would think of asking for, and a force the cost of which might not be adequately repaid by the additional revenue derived. What we believe ourselves to be doing, is, restraining the mass of the population from making salt at all, and keeping the produce of the comparatively few who do, after all, set the law at defiance, individually petty. It will next be noted, that fairly balanced, as nearly equal, as such figures, depending on fortuitous circumstances, could be expected to be in the two earlier years of the series, there came in the two later a very sudden fall in the number of persons seized, so that the return for 1868-69, is not even the half (less than 43 per cent. in fact) of those captured in 1865-66. This is the effect of the rules issued on the recommendation of the present Commissioner under the Order of Government 152A. of the 9th October, 1867, which remit prosecutions when only brine or utensils for manufacture are found, or when the quantity of illicitly-manufactured salt discovered falls below one seer. Until these rules passed, we had to send for trial all who possessed either utensils which had been used for manufacture of salt, or the simple solution from which it was to be extracted. It is not to be doubted that, under the less rigid system now in vogue, more salt is made than when the possession of a fraction of a chittack, coupled with proof that the holder was also the maker, entailed prosecution; and there is a strong feeling among many of the officials employed in the Internal Department against the relaxation, but our test, in a fiscal point of view, is the condition of the Line revenue, and judging by this we have so far no reason to think that sensible harm has resulted, or that those who, under present regulation, do confessedly make somewhat more salt than they could venture on under the stricter rule, have succeeded in doing much more than supplying, first, the needs of their own household, and next, those of a few others of the same class. This is not, it must be said, the opinion of some of our Executive Officers, who, notably in Oudh, charge the change with doing great and increasing mischief. But these officers are perhaps too close to the fact to be able to gauge it precisely. They see what beyond doubt *is* the fact, a good deal of small salt manufacture, such as they have been accustomed to put down, and they exaggerate its influence. We, who from a higher stand-point obtain a broader view, are more likely to possess the truth, and to us it seems that little harm has happened. If, in brief, with these more liberal provisions tempering the first, and at first necessary, sternness of the internal regulations, we can keep our import revenue in the same healthy state which, notwithstanding the innovation, it has hitherto maintained, we may congratulate ourselves on being rid of half our prosecutions, and on escape from the necessity of crowding the jails with people who perhaps cost the State as much to maintain in prison, as their contraband industry took from the revenue when at large. Odium and disfavour, not merely among the classes whom our action directly affected, but even among our colleagues in other public departments, resulted, and, even to lessen these, it would be worth our while to endure such apparently unimportant losses as hitherto are known to have followed on relaxation.

Its significance

does not indicate entire suppression,

which is beyond our means,

but restriction to petty production by a fraction of the people.

Sudden falling off of seizures,

caused by G. O. No. 152A. of 9th October, 1867.

Action of its Rules.

Former conditions.

Somewhat more salt is now made.

Relaxation unpopular in the Department.

Line Revenue, the real test,

shows no great harm to result.

Some Departmental Officers think differently,

but are probably in error.

Beneficial effect of relaxation, apart from fiscal considerations.

Paucity of seizures in certain Circles.

32. It will likewise be seen that, in comparison with other circles, the penal action of the Department has fallen very lightly in Boolundshuhur, Banda, and Goruckpore. The first of these, containing the Ghazeeabad salt lands, and very

considerable tracts which yield sulphate of soda, is capable of doing too much mischief, for any reorganiz ation of its force, *in the sense of diminution,* to be advisable; indeed the extrem e paucity of seizures in a circle so exposed to illicit influences, has become suspicious, and has been made matter of still-pending inquiry. But in the Circles of Banda and Goruckpore, modifications, such as lie under Rule 6 of the G. O. North-Western Provinces, No. 247A., of the 15th November, 1861,* within the competence of the Department, appear likely to be profitable, and have in fact been arranged for.

Certain readjustments of jurisdiction, seem advisable,

and have been arranged for.

33. The following table shows how the persons captured by the Department during this series of years have been disposed of. In 1868-69, out of 1,371 persons seized, 311, or 22·68 per cent., were released without further process, under G. O. No. 152A. of 9th October, 1867; 8 persons, or 0·58 per cent, in consideration of various infirmities; 1, or 0·07 per cent., on proof of ignorance or inadvertence; and 206, or 15·02 per cent., after Departmental inquiry, for want of such evidence as seemed to ensure conviction. Thus, 526 persons, or 38·36 per cent., of those actually captured underwent no inconvenience, but the very mild infliction of Departmental investigation; while 832, or 60·68 per cent., were criminally prosecuted; while 13, or 0·94 per cent., were still under Departmental inquiry when the year closed.

PERSONS SEIZED.

1868-69 percentages,

of those released by the Department,

of those prosecuted.

34. Of the 832 persons prosecuted, 174, or 20·91 per cent., were acquitted; 566, or 76·48 per cent., *on ascertained decisions,* had been convicted; and, when the year closed, decisions were unknown in respect to 92, or 11·05 per cent. These figures will be somewhat altered in next year's Report, when all results have been recorded, and in especial, the percentage of convictions may be expected to rise.

Results of prosecutions

35. The proportion of successful to unsuccessful prosecutions falling far short of the item (cent. per cent.) which alone can be pronounced *satisfactory,* is still, when the peculiarities of the position are duly allowed for, not altogether the reverse. In paragraph 116, page 73, of his General Review of last year's administration, the Commissioner has explained the trenchant difference between the cases occurring on the Line and in the Internal Department. It may be added that the former are usually very simple, while the latter are not infrequently very complex, taxing at the outset, much more severely than do those of the Line, the acumen of the officers with whom it rests to release or to prosecute. Prosecution decided on, there is often the question (open to difference of opinion) of quality of the substance seized, a difficulty with which the Line official is *never* beset. He knows that when he has inspected the contents of a bundle and found it to be salt, it will be useless for anyone to attempt to prove it flour, or lime, or what not; and a little dirt more or less adds nothing to his difficulties. It is often otherwise in the Internal Branch, where the quality of the substance seized is frequently challenged, and where, unless it happens to be of such unexceptional excellence as leaves no room for question there is the searching examination by our analyst, (who follows with unswerving impartiality the guidance of his re-agents) to be abided by. Whatever expertness long practice may confer, the indications of eye or palate will often prove fallacious when pitted against chemical test, and not a few of our cases fall through on the faith of opinions recorded by our own officers. When no difficulty occurs as to quality, even when no one disputes that the stuff seized

Proportion of convictions to committals.

Difficulties in the way of conviction;

Departmental.

* Rule 6, G. O., North-Western Provinces, No. 247A., of 15th November, 1861 (rules for giving effect to Act XXXI. of 1861):—

"The Deputy Commissioner of Customs, subject to the approval of the Commissioner of Customs, "shall assign to each Inspector, or Deputy Inspector, the charge of certain Districts; and shall, with "the sanction of the Commissioner, be competent to extend, reduce, or otherwise modify, as the exigen- "cies of the service may require, the jurisdiction of any subordinate officer."

is salt, and that illicitly made, there is the difficulty of legal proof to be overcome. Very commonly our witnesses are captors and witnesses both—often unavoidably so—and the Court feels a not unnatural distrust of the testimony of men who have a direct pecuniary interest in the result of their own evidence. And if the accused stands well with his neighbours, or if his zemindar feels that conviction of the tenant is not unlikely to entail consideration of his own responsibility for an act, often patent enough to those who go about with their eyes open, any number of *respectable* witnesses are ready to swamp the evidence of the "*interested*" and, *ex-officio*, unpopular Customs' subordinates. Sometimes casesfall through on questions of form, sometimes, too, a Court itself makes a mistake, misapprehends a fact, misreads or misapplies a law.* Considering, then, how many pitfalls have to be escaped, remembering that our superior officers have each wide areas to supervise, rendering it simply impossible for them to conduct all, or even most, of their prosecutions in person, that all through the dry months, they must be in constant movement, and that they are thus obliged to trust the fate of most of their prosecutions to the unadvocated evidence of illiterate subordinates, the results of criminal prosecutions, as herein exposed, will not perhaps be held to do the Department discredit. They still appear slightly in advance of those obtained before the Higher Courts by Magistrates of various grades, in the North-Western Provinces, in the series of years given in the table below, extracted from the Commissioner's Administration Report for 1867-68, page 72, to which may now be added the figures for 1867.

Distrust in Court of Departmental witnesses.

Aid commanded by accused.

Misapprehensions by Courts.

Inability of our Officers to prosecute in person.

Results, therefore, not discreditable.

Percentages slightly in advance of general judicial committals.

Judicial committals.

36. Percentages of convictions before Sessions Judges and Commissioners:—

Year.	1867.	1866.	1865.	1864.
Percentage, ...	73	74	73	79

Comparison of percentages.

SYNOPSIS OF DISMISSALS BY COURTS.

37. The following table will show the grounds on which, during the year under report, cases have been dismissed by Courts in the North-Western Provinces:—

Causes,

Districts in which occurring,

Number of cases.

Name of District.	CAUSES OF DISMISSAL.						
	Want of proof.	Impurity of substance seized.	Non-attendance of witnesses.	Discrepancies in evidence of Customs men.	False report by informers.	Absconding of accused.	Total.
Agra, ...	...	...	...	...	...	...	...
Muttra, ...	2	...	...	...	...	...	2
Allygurh, ...	...	...	...	...	1	...	1
Etah, ...	2	1	...	...	...	...	3
Budaon, ...	3	...	2	...	...	...	5
Furruckabad, ...	1	...	...	...	...	...	1
Shahjehanpore,...	1	...	...	...	...	...	1
Etawah, ...	5	...	...	...	...	...	5
Mynpoorie, ...	3	...	...	...	...	...	3
Futtehpore, ...	1	...	...	...	...	1	2
Cawnpore, ...	2	...	...	...	...	...	2
Allahabad, ...	6	...	2	1	...	1	10
Mirzapore, ...	1	2	...	...	...	...	3
Jounpore, ...	2	2	1	...	...	4	9
Benares, ...	2	...	...	...	...	1	3
Azimgurh, ...	...	2	...	1	...	1	4
Ghazeepore, ...	2	...	...	2	...	...	4
Total, ...	33	7	5	4	1	8	58

* We have, for instance, now on record an admission from the Magistrate of a district, that an acquittal by one of his subordinates was the result of such a misapprehension.

38. Compared with the results of preceding twelve months, the percentage of convictions in 1868-69, shows, as the subjoined table will confirm, a distinct improvement, liable as has already been mentioned, to change for the better when the results of all pending cases come to be known. Thus gauged, the year just ended is the best of the whole :—

Proportion of convictions as compared with pas years,

	Percentage of convictions.	
1868-69.	76·48	*shows improvement.*
1867-68.	66·28	
1866-67.	75·11	
1865-66.	72·22	

39. Early in the year, this Office addressed a Circular to its subordinates, urging the necessity of close attention to preparation of cases, and enlarging on the importance of sending for trial none in which conviction did not appear assured. With every disposition to make allowance, it cannot be denied that these injunctions have at times not been followed out with all the care desirable, and that out of our acquittals, a fair number have resulted from error of judgment on the part of our own officers. Effort will be made to ensure improvement. Putting aside the three instances in which, on very small numbers, the incidence of convictions is cent. per cent., *i. e.*, in Boolundshuhur, Banda, and Goruckpore, the highest percentage attained in 1868-69, has been in Jounpore, where 86·22 per cent. of the cases tried have resulted in convictions. The lowest is in Budaon, where but 41·17 of our cases have succeeded.

Action of this Office *towards that end not yet satisfactorily responded to.*

Highest percentages of convictions, *where obtained, Lowest, where occurring.*

40. Of the 556 persons convicted in 1868-69, 211, or 37·27 per cent., underwent imprisonment, and 355, or 62·72 per cent., paid fines aggregating Rs. 3,182-8-10, or an average of Rs. 8-15-5.

Numbers who were imprisoned, *and who paid fines*, 1868-69,

41. Of the 800 persons convicted in 1867-68, 312, or 39 per cent., underwent imprisonment, and 488, or 61 per cent., paid fines aggregating Rs. 4,118-14-11; average, Rs. 8-7-0.

ditto ditto 1867-68,

42. Of the 1,902 persons convicted in 1866-67, 740, or 38·90 per cent., underwent imprisonment, and 1,162, or 61·09 per cent., paid fines aggregating Rs. 10,562-9-3; average, Rs. 9-1-1.

ditto ditto 1866-67,

43. Details for 1865-66 for certain circles have not been furnished in time by the Assistant Commissioner.

Figures wanting for 1865-66.

APPENDIX I

INTERNAL DEPT., N.-W. P.

Table showing the number of persons who underwent imprisonment and paid fines.

Year.	*Imprisoned in default of payment of fine.*											*Paid Fines.*														
	No. imprisoned for 6 months.	Ditto above 3 months.	Above 2 months.	Above 1 month.	Above 15 days.	Above 10 days.	Below 10 days.	Total who underwent imprisonment.	Above Rs. 100 and below Rs. 250.	Aggregate paid.	Above Rs. 50 and below Rs. 100.	Aggregate paid.	Above Rs. 30 and below Rs. 50.	Aggregate paid.	Above Rs. 20 and below Rs. 30.	Aggregate paid.	Above Rs. 10 and below Rs. 20.	Aggregate paid.	Above Rs. 5 and below Rs. 10.	Aggregate paid.	Below Rs. 5.	Aggregate paid.	Total who paid Fines.	Aggregate paid.	
										Rs. As. P.		Rs. As. P.		Rs. A. P.		Rs. As. P.		Rs. As. P.		Rs. As. P.		Rs. As. P.		Rs. As. P.	
1868-69.																									
Agra, ...	...	...	1	6	...	...	...	7	...	...	...	...	...	...	...	...	7	75 0 0	2	10 0 0	...	...	9	85 0 0	
Allygurh, ...	1	1	4	7	...	...	...	13	...	...	1	50 0 0	1	40 0 0	4	80 0 0	4	41 0 0	1	5 0 0	3	3 0 0	14	219 0 0	
Boolundshuhur, ...	...	...	...	...	...	...	...	...	...	...	1	50 0 0	...	...	...	...	...	...	...	...	...	...	1	50 0 0	
Budaon, ...	...	...	2	...	...	...	...	2	...	...	...	...	...	...	1	20 0 0	4	40 0 0	...	...	...	...	5	62 10 0	
Mynpoorie, ...	...	10	6	5	...	...	...	21	1	108 3 2	4	200 0 0	...	...	8	185 0 0	15	170 3 6	4	20 0 0	1	1 12 0	32	685 2 8	
Furruckabad, ...	...	...	6	5	...	...	...	11	...	...	...	...	...	...	1	20 0 0	12	125 0 0	10	57 0 0	...	13 5 3	23	215 5 3	
Cawnpore, ...	...	...	4	9	1	...	...	14	...	...	3	150 0 0	1	40 0 0	2	45 0 0	12	130 0 0	25	129 9 11	15	33 12 11	58	528 6 10	
Allahabad, ...	...	4	9	35	18	4	...	70	...	...	...	...	1	30 0 0	4	85 0 0	30	315 0 0	13	71 2 0	34	74 7 10	82	575 9 10	
Banda, ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	10 0 0	...	...	...	...	1	10 0 0	
Jounpore, ...	...	6	35	11	1	...	...	53	...	...	...	...	1	30 0 0	1	20 0 0	14	140 10 0	39	230 2 9	36	108 4 0	91	529 0 9	
Ghazeepore, ...	...	2	7	8	3	...	...	20	...	...	1	55 0 0	...	...	...	...	2	20 0 0	19	110 0 0	16	36 15 6	38	221 15 6	
Goruckpore, ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	0 6 0	1	0 6 0	
Total, ...	1	23	74	86	23	...	4	211	1	108 3 2	10	505 0 0	4	140 0 0	21	455 0 0	101	1,066 13 6	113	632 14 8	105	274 9 6	355	3,182 8 10	
1867-68.																									
Agra, ...	...	...	1	...	...	...	...	1	...	...	1	51 0 0	...	...	1	20 0 0	3	30 0 0	4	20 0 0	...	...	9	121 0 0	
Allygurh, ...	...	2	...	7	3	...	...	12	1	100 0 0	2	140 13 4	5	150 0 0	...	...	6	70 0 0	5	25 0 0	10	16 13 0	29	502 10 4	
Boolundshuhur, ...	...	...	...	1	...	...	...	1	...	...	1	50 0 0	...	...	...	...	...	...	2	10 0 0	...	...	3	60 0 0	
Budaon, ...	...	...	...	...	2	...	...	2	...	...	...	...	...	...	3	60 0 0	3	35 0 0	2	10 0 0	...	3 14 0	8	108 14 0	

Mynpoorie, ...	5	14	10	10	...	...	...	39	2	200	0	0	2	144	0	0	6	193	5	6	7	155	0	0	11	130	3	6	19	98	0	0	34	135	8	0	81	1,056	1	0
Furruckabad,	...	...	...	6	6	...	...	12	...	...			1	50	0	0	...	...			7	145	15	9	8	90	0	0	1	6	0	0	8	25	0	0	25	316	15	9
Cawnpore, ...	1	1	4	8	...	...	...	14	...	...			...	...			3	90	0	0	5	115	0	0	26	319	8	0	...	...			61	172	12	6	95	697	4	6
Allahabad, ...	...	5	2	11	19	...	3	40	...	...			1	50	0	0	1	35	0	0	4	90	0	0	21	233	0	0	...	...			45	108	14	7	72	516	14	7
Banda, ...	...	3	1	1	...	...	...	5	...	...			...	...			...	...			...	...			4	40	0	0	2	14	13	6	...	...			6	54	13	6
Jounpore, ...	1	2	13	80	31	...	21	148	...	...			...	...			...	...			1	20	0	0	18	206	12	6	22	127	0	0	63	151	8	0	104	505	4	6
Ghazeepore, ...	2	3	7	4	4	1	2	23	...	...			...	...			...	...			...	...			6	64	0	0	9	45	8	0	34	56	7	9	49	165	15	9
Goruckpore, ...	...	...	1	3	4	3	4	15	...	...			...	...			...	...			...	...			...	...			1	5	0	0	6	8	1	0	7	13	1	0
Total, ...	9	30	39	131	69	4	30	312	3	300	0	0	8	485	13	4	15	468	5	6	28	605	15	9	106	1,218	8	0	67	361	5	6	261	678	14	10	488	4,118	14	11
1866-67.																																									
Agra, ...	...	...	1	...	1	...	1	3	1	100	0	0	...	...			...	...			2	45	0	0	5	60	0	0	7	35	0	0	8	12	0	0	23	252	0	0
Allygurh, ...	6	3	4	14	3	2	10	42	6	704	0	0	6	325	0	0	3	107	8	0	4	79	12	4	19	195	0	0	34	176	13	1	30	81	5	0	102	1,669	6	5
Boolundshuhur,	1	3	4	7	...	...	1	16	1	100	0	0	2	100	0	0	...	...			2	45	0	0	3	35	0	0	2	10	0	0	...	...			10	290	0	0
Budaon, ...	...	1	...	6	...	...	...	7	1	100	0	0	...	...			1	30	0	0	10	215	0	0	5	61	14	0	3	17	14	6	2	2	0	0	22	426	12	6
Mynporie, ...	...	2	5	11	7	...	1	26	...	...			2	102	0	0	1	30	0	0	17	392	2	9	24	271	0	0	17	101	3	9	13	26	1	3	74	922	7	9
Furruckabad,	1	5	20	3	6	...	...	35	...	...			2	100	0	0	2	60	0	0	9	215	0	0	33	412	0	6	24	135	12	4	7	21	7	9	77	944	4	7
Cawnpore, ...	2	7	22	19	2	...	...	52	2	253	0	0	5	320	3	10	4	120	0	0	15	310	0	0	29	302	15	0	77	359	1	0	...	...			132	1,665	3	10
Allahabad, ...	4	17	5	14	65	...	5	110	...	...			1	50	0	0	2	60	0	0	12	245	0	0	39	500	0	0	32	162	0	0	45	76	4	0	131	1,093	4	0
Banda, ...	...	...	...	...	...	...	1	1	...	...			...	...			...	...			1	25	0	0	1	10	0	0	26	41	12	0	1	2	0	0	29	78	12	0
Jounpore, ...	9	67	172	32	15	...	1	296	...	...			...	...			4	120	0	0	12	250	0	0	58	660	0	0	172	1,001	0	0	176	489	8	0	422	2,520	8	0
Ghazeepore, ...	...	7	34	24	11	2	9	87	...	...			...	...			1	30	0	0	4	90	0	0	21	210	0	0	35	188	6	0	68	150	12	2	129	669	2	2
Goruckpore, ...	...	1	3	18	29	4	10	65	...	...			...	...			...	...			...	...			2	20	0	0	1	5	0	0	8	5	12	0	11	30	12	0
Total, ...	23	113	270	148	139	8	39	740	11	1,257	0	0	18	997	3	10	18	557	8	0	88	1,911	15	1	239	2,737	13	6	430	2,233	14	8	358	867	2	2	1,162	10,562	9	3

APPENDIX I.

INTERNAL DEPT., N.-W P.

Table showing the number of persons apprehended by the Department, and how disposed of.

Year.	Total number of persons captured by the Department.	Released by Department.				Pending investigation of the Department.	Sent for trial.	Acquitted.	Convicted.	Pending when report was submitted.	Percentage of convictions on number of persons sent for trial, deducting those whose cases were still undecided.
		For making less than one seer.	Infirm persons, pregnant women, or minors.	On proof of ignorance or inadvertence.	For want of proof.						
1868-69.											
Agra, ...	45	8	1	...	7	...	29	13	16	...	55·17
Allygurh, ...	71	4	1	...	24	...	42	15	27	...	64·28
Boolundshuhur, ...	1	...	...	...	...	...	1	...	1	...	100·00
Budaon, ...	23	2	...	...	2	...	19	10	7	2	41·17
Mynpoorie, ...	96	8	...	...	15	...	73	20	53	...	72·60
Furruckabad, ...	62	14	...	...	7	...	41	7	34	...	82·92
Cawnpore, ...	188	11	...	1	66	2	108	31	72	5	69·90
Allahabad, ...	235	29	...	...	12	...	194	39	152	3	79·58
Banda, ...	5	1	...	...	...	...	4	...	1	3	100·00
Jounpore, ...	489	187	6	...	57	...	239	23	144	72	86·22
Ghazeepore, ...	135	36	...	...	15	4	80	16	58	6	78·37
Goruckpore, ...	21	11	...	...	1	7	2	...	1	1	100·00
Total, ...	1,371	311	8	1	206	13	832	174	566	92	76·48
1867-68.											
Agra, ...	26	...	...	...	...	...	26	16	10	...	38·46
Allygurh, ...	105	...	...	1	36	...	68	27	41	...	60·29
Boolundshuhur, ...	13	...	...	...	8	...	5	1	4	...	80·00
Budaon, ...	20	...	...	1	4	...	15	5	10	...	66·66
Mynpoorie, ...	233	...	...	...	20	...	213	93	120	...	56·33
Furruckabad, ...	50	2	...	...	6	...	42	5	37	...	88·09
Cawnpore, ...	275	13	...	...	52	...	210	101	109	...	51·90
Allahabad, ...	180	17	...	...	32	...	131	19	112	...	85·49
Banda, ...	23	...	...	2	7	...	14	3	11	...	78·57
Jounpore, ...	471	43	...	...	65	...	363	111	252	...	69·42
Ghazeepore, ...	130	24	...	...	9	...	97	25	72	...	74·22
Goruckpore, ...	25	...	...	...	2	...	23	1	22	...	95·65
Total, ...	1,551	99	...	4	241	...	1,207	407	800	...	66·28
1866-67.											
Agra, ...	56	...	...	...	...	...	56	30	26	...	46·42
Allygurh, ...	243	...	...	...	36	...	207	63	144	...	69·56
Boolundshuhur, ...	92	...	...	...	61	...	31	5	26	...	83·87
Budaon, ...	97	...	...	4	37	...	56	27	29	...	51·78
Mynpoorie, ...	226	...	...	...	17	...	209	109	100	...	47·84
Furruckabad, ...	160	...	...	...	16	...	144	32	112	...	77·77
Cawnpore, ...	297	...	7	...	22	...	268	84	184	...	68·65
Allahabad, ...	367	...	1	...	39	...	327	86	241	...	73·70
Banda, ...	44	...	...	...	10	...	34	4	30	...	88·23
Jounpore, ...	988	...	5	...	106	...	877	159	718	...	81·87
Ghazeepore, ...	269	...	...	1	24	...	244	28	216	...	88·52
Goruckpore, ...	83	...	...	...	4	...	79	3	76	...	96·20
Total, ...	2,922	...	13	5	372	...	2,532	630	1,902	...	75·11

Ability of those convicted to pay fines,

44. It is thus shown that, through a series of years, the classes who are specially notorious for breaking the Customs Laws, and who are supposed to belong to the very poorest of the community, whose extremity of poverty has, as matter of fact, excited no little sympathy among the more impressionable of judicial authorities and others, and has furnished the theme of some declamation against the system administered by this department, have, nevertheless, found means, to the extent of something approaching to two-thirds of the number who have got into trouble, to pay fines, which, taken over the last three years, average Rs. 8-13-0, an important sum to an Indian labourer, of those classes at least, to whom infraction of law is not a profession.

important in amount,

as gauged by means of ordinary labourers,

who break no law.

MISCELLANEOUS.

Condition of saltpetre trade; *prices at home,*

45. The condition of the saltpetre trade has been briefly alluded to in the early part of this Report. Prices have risen in the Home market: from having been as low as eighteen shillings per cwt., they have gone up to twenty-five; and there has been a good demand from China. And, although there has been some fluctuation of price in Calcutta—the minimum rate of the preceding year, *viz.*, Rs. 5-1 0 per maund, having been current in April and part of May, 1868—the maximum of that year, viz., Rs. 5-10-0, had again been attained by October; from whence prices rose until, in February of this year, their highest point, Rs. 6-10-0, was attained. When the year closed, the market rate was Rs. 6-6-0 for good saltpetre, *viz.*, 2 to 3 per cent. refraction. Exports, as will be seen in the following synopsis of the trade of three official years, notwithstanding that in January of this year difficulties about freight caused a very large falling-off, have in consequence increased on the whole by over 47,000 maunds, as compared with those of 1867-68 :—

variation in Calcutta,

closing rate;

increase in exports;

Month.	1866-67.	1867-68.	1868-69.
	Maunds.	Maunds.	Maunds.
April, ...	71,115	67,703	65,062
May, ...	1,04,962	56,531	44,741
June, ...	51,470	21,399	18,880
July, ...	40,651	27,100	31,668
August, ...	33,325	21,672	26,872
September, ...	45,506	21,374	25,170
October, ...	18,835	12,699	39,560
November, ...	26,290	10,740	34,321
December, ...	39,792	41,118	58,550
January, ...	42,044	58,938	5,422
February, ...	46,078	51,075	61,147
March, ...	53,864	28,053	54,173
Total, ...	5,73,932	4,18,402	4,65,566

future of trade still uncertain;

46. Hitherto, there has been such an air of uncertainty about the trade that it has not appeared prudent for this Office to make any special effort to direct attention of those interested in it to its perhaps but temporary resuscitation. The regular circulation of Calcutta rates, which are furnished every fortnight to every refiner of saltpetre in the North-Western Provinces and in Oudh, has, therefore, been adhered to; the rest being left to the test of time. But the makers, as an increase of more than 37 per cent. in the number of works may evidence, have recognized and prepared to profit by the favourable turn of trade. It is yet early in the year for an attempt at forecast, but so far our returns point to a sustained improvement. That it will go so far is hardly to be hoped for, remembering the the great progress which the artificial production has made throughout Europe.

makers stimulated by bettered prices;

prospects at present good.

Outturn of salt from saltpetre refineries.

47. Salt has cleared from bond, in saltpetre refineries, to the amount of 11,243 maunds 5 seers 5 chittacks in 1868-69, against 11,407 maunds 36 seers 4 chittacks* in 1867-68. The difference 164 maunds 30 seers 11 chittacks or (1·43 per cent.) is

* A clerical error occurred in para. 22 of last year's Report, in which this quantity was given as 12,008 maunds 12 seers 4 chittacks. The difference was occasioned by omitting to deduct 600 maunds 16 seers 10 chittacks, allowed as dryage under Rule 42 of the G. O. No. 247A., of 15th November, 1861.

Cause of decrease.

due to the very depressed condition of the saltpetre trade in the first half of the year. The account stands thus:—

Year.	Salt educed in Refineries under Mooshriffs.	Duty thereon at Rs. 3 per maund.	Received under Contracts.	Fractional Receipts.	Total.
	Mds. S. C.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
1868-69, ...	11,243 5 5	33,729 6 5	1,104 1 9	1 8 3	34,835 0 5
1867-68, ...	11,407 36 4	34,223 11 6	1,703 12 0	2 0 1	35,929 7 7

REFINERIES UNDER CONTRACT.

48. The number of refineries working under contract is the same as last year, *viz.*, 9, but the sum realized is Rs. 599-10-3, or 35·11 per cent. less. The depressed condition of the trade, when these contracts were given, obliged us to consent to certain reductions. We shall probably obtain better terms with these contracts, which, it may be noted, are never given to any but very petty firms, in the current year.

SALT MADE IN REFINERIES; Price &c.

49. Salt made in saltpetre refineries finds ready sale at prices varying from Rs. 3-4-0 to Rs. 4-8-0 per maund. It is sold both pure, and mixed with other salts.

KHAREE WORKS.

No new matter to bring forward.

50. About sulphate of soda (kharee) works, there is only this to say, that we have been sharper than ever with them; and that the proof which they have had of our possession of a power (ability to refuse licenses) which, with all their astuteness, their aptitude for combination, their many opportunities of outwitting us, renders us in the long-run more than their match, may, coupled with the effect of the additional supervision which it is proposed to bring to bear on them, dispose them in the coming season to restrict themselves to production of what the law permits, and which finds ready and profitable sale.

IMPORT OF WESTERN AND EASTERN SALTS.

51. There is nothing before me this year to show that the Eastern salts are gaining ground on the Western. Trade in salt has been brisk, stimulated by the demand for grain in Rajpootana. Beyond this general information, borne out by the indications of the Line Revenue, I am in possession of nothing with which it would be profitable to lengthen out this Report.

INDIVIDUAL CONSUMPTION OF SALT.

Information epitomized in Commissioner's Report.

52. The same may be said of enquiries in connection with consumption of salt by the population of these Provinces. Such information as has been obtained in the circles subordinate to this Office has been epitomized, and will appear in Appendix A. to the Administration Report by the Commissioner. It is superfluous to repeat it here.

ESTABLISHMENT CASUALTIES.

53. The year's casualties in the Internal Branch of the Department are exhibited and classified in the following table. From divers causes, it has lost 260 officials of varying grades, from Sub-Deputy Inspector to Peon, or 25·84 per cent. on its total:—

	Number of each Rank and Grade.							Total Subordinate Establishment.	Percentage of total of each kind of casualty on total of Establishment.
	Sub-Deputy Inspectors.	Mohurrirs.	Mooshriffs.	Kotegushts.	Jemadars.	Lance-Jemadars and Peons.	Orderlies.		
Total sanction, ...	32	24	135	49	65	653	48	1,006	
Died, ...	...	2	...	...	...	5	...	7	0·69
Dismissed, ...	1	...	3	7	11	151	1	174	17·29
Deserted, ...	...	...	...	...	...	9	...	9	0·89
Resigned, ...	...	4	1	6	1	58	...	70	6·95
Total of Casualties, ...	1	6	4	13	12	223	1	260	25·84

Health of Force,

54. The health of the establishment has been excellent, and the losses from death have been but 0·69 per cent. This, considering the exposure to which of necessity its whole staff is exposed, is gratifying.

Dismissals;

55. The percentage here is large, *viz.*, 17·29; but it was 21 per cent. in 1867-68. It has been somewhat swelled by the effect of an order promulgated on receipt of sanction for increase to salaries, to weed out men in any way incompetent for service. Fourteen men were thus dismissed, forming 8 per cent. of the whole number* so dealt with.

Causes.

56. The causes which have led to dismissal of subordinates are concisely stated in the following table:—

Causes.	Sub-Deputy Inspectors.	Mohurrirs.	Mooshriffs.	Koteghshts.	Jemadars.	Lance-Jemadars and Peons.	Orderlies.	Total.
Collusion, ...	...	...	1	...	...	1	...	2
Falsifying records and false reports, ...	1	...	...	...	2	13	...	16
Reception of bribes, ...	...	...	...	1	3	21	...	25
Unfitness for duty, ...	...	...	...	1	...	13	...	14
Unauthorized absence, ...	...	...	2	2	3	66	...	73
Disobedience and disrespect to Officers, ...	...	...	...	1	1	9	...	11
False returns of residence, ...	...	...	...	...	1	11	...	12
Asking gratuities, ...	...	...	...	...	...	...	1	1
Illegal seizures, ...	...	...	...	...	1	11	...	12
Allowing escape of prisoners, ...	...	...	...	...	...	1	...	1
Miscellaneous, ...	...	...	...	2	...	5	...	7
Grand Totals, ...	1	...	3	7	11	151	1	174

Percentage of dismissal attributable to each;

for unauthorized absence nearly half of the whole.

57. Out of these 174 dismissals, nearly half (41·93 per cent.) are for unauthorized absence, including overstaying leave. This item will probably be much reduced in coming years. It has not hitherto been the practice of the Department to apply to its lower subordinates the spirit of the rule which entails forfeiture only when the leave has been overstayed by more than one month. This, under the order of the Commissioner, will in future be done; and with salaries increased and prospect of provision for old age for those who pass their manhood in the service, we may fairly expect to see appointments more highly valued and more carefully retained.

Probabilities of amendment.

Percentages of dismissals for heinous offences.

58. The most heinous of all the recorded offences, collusion and reception of bribes, have led to but 15·51 per cent. of the dismissals; the next worse in degree, falsification of record and report, to 9·19 per cent.

Assistant Commissioners alone empowered to dismiss.

59. No officer below the rank of Assistant Commissioner possesses the power of dismissal. This Office now rarely interferes with the decisions of the abovenamed superior officers in connection with offenders below the grade of office mohurrir; but would do so on cause shown. It is thus certain that each man's case receives patient hearing; and though, were this Office to scrutinize *every* dismissal in the lower grades, ground for difference of opinion might sometimes be apparent, it may be asserted with some confidence that, undesirably large as the percentage of dismissals continues to be, the majority are based on conditions which, bearing in mind that the misdemeanours of our people are not easy to detect, render a certain degree of severity a duty.

* This reduces the percentage of administrative dismissals to 15·90, which contrasts better than ever with the figures of the year immediately preceding, and is but 2·40 per cent. in advance of those of 1866-67.

Departmental prosecutions of subordinates.

60. Of those dismissed for collusion, a mooshriff was criminally prosecuted, but—in great measure by fault of the Native officer to whom, in absence of the Deputy Inspector, conduct of the case had to be entrusted, aided by what seemed to this Office error of judgment on the part of the Court—escaped punishment. Subsequently, the officer who tried the case himself came to see that the truth lay with us, not with the defendant; who was acquitted without being put on his defence.

Independent criminal proceedings against the same.

61. Three peons have brought themselves under independent criminal prosecution. One of these was fined Rs. 5 for brawling; the two others, Re. 1 each for appropriating vegetables. These cases, which happened within the personal jurisdiction of the Assistant Commissioner, were not at the time brought to notice of this Office, and no Departmental action appears to have been thought necessary by Mr. Ray. I should probably have dismissed the two latter men had their cases come before me at the time, petty extortion of the kind being one of the things which, difficult to discover, require sharp treatment when brought home. But a percentage of extra Departmental offences (these being of no heinous type) of 0·39 cannot be said to augur badly of the demeanour *towards the public* of the subordinates of a department notoriously not popular.

Pettiness of offence.

Small percentage.

OFFICERS: Deputy Inspectors.

62. Sixteen officers of the rank of Deputy Inspector have served in this branch during the year. Practically though, the number has not exceeded twelve, the other four filling the places of absentees; and the twelve have traversed, in regular marches—independently of what some, as Messrs. Adam and Bradford, have done on deputation—a total of 22,216 miles, or an average of 1851 miles each, and have visited 8,073 saline factories of kinds. They have made useful additions to our collection of facts connected with individual consumption of salt, and whether in inspection of saline lands, prosecution of cases in Court, or investigation of departmental cases, have done much work, which it is impossible to gauge by simple mileage. Stationary for days at a time, an officer of this branch may still be honestly earning his pay; and it may be mentioned that every one of them sends in a weekly diary which, sooner or later, according as the writer is subordinate to the Assistant Commissioner, or directly to the Head of this Office, passes under the eye of the latter, whose remarks, in his own handwriting, on the Monthly Statement of Work, likewise submitted by each officer, go regularly to each, who thus, month by month, knows as accurately as very plain phrases can instruct him, what is thought of his work by the highest authority with whom he usually comes in contact.

Work done;

how supervised.

Individual work; *highest returns.*

63. Judged by outdoor work, taken over long periods, the best return is that of Mr. R. V. Freeander, whose aggregate was 2,725 miles, or 7·46 per diem—not bad even on the Line. Mr. H. Browne comes next, with 2,207 miles for 331 days' service, or 6·66 per diem. Mr. MacCheane has an average of 6·55 for 177 days. Mr. C. G. Durant, who has suffered much in health, comes next with 6·58 per diem over 268 days' work. Mr. C. M. Smith follows with 6·44 over 365 days. The highest average was reached by Mr. W. C. Howard, who, in 39 days, did an average of 8·84 per diem. Of the two officers whose work, judged by average and mileage, is least, Mr. R. M. Adam, whose average is 3·88, was frequently employed on important work inconsistent with movement; and Mr. Hardingham, whose average is 3·23, rendering important service in attending at trials of cases, was helplessly tied down to his Head-quarters for the better part of two months by dangerous illness in his family. To have replaced him, would have caused more departmental disturbance than the result would have been worth. No new comer, however active, could have kept the work as well in gear as this able and experienced officer, even if himself quiet in office, and he was therefore left in peace. But as Government could not be allowed to pay for work which was not done, he drew no travelling allowance for the time in question.

Lowest returns; cause explained.

Work by Sub-Deputy Inspectors;

64. If to the 22,216 miles, mentioned in paragraph 62, be added the distances traversed by Sub-Deputy Inspectors, which is considerably more than double the above number, we shall have at the very lowest computation a total of 66,000* miles travelled over by *supervising* officers of this branch. It would be mere piling up of figures to add the distances traversed by subordinates, but 2,00,000 miles is within their total.

by lower grades.

Visits to factories.

65. The return of factories visited is not quite what it might be. We have had 7,036 saline factories at work during the year, so that the utmost we can assume is that each superior officer has personally inspected every one of his factories once during the year. But it is so impossible to chain down these gentlemen to rigid proportions of work, that no unfavourable deduction can fairly be drawn from the absence of a higher figure of visits per factory.

Deputations of officers.

66. It will be understood that no kind of complaint is intended when the fact is noted that deputations of officers—as of Mr. Ray to Rewah, Mr Adam to Tirhoot, Mr. Bradford to Rampore and to Oudh—have somewhat obstructed the regular work of the year. Such duty is always cheerfully undertaken, and allusion here merely points to the certainty that more work would have been done on the ordinary scene of their labours, had not these officers been temporarily employed elsewhere.

Travelling of Assistant Commissioner.

67. Work of higher officials is altogether unsusceptible of test by mileage, but it may be stated that the Assistant Commissioner has traversed 2,426 miles, of which 1,133 by marches.

Deaths of officers.

68. The department has lost by death in the course of the year two excellent officers, Messrs. C. Bartlett and R. V. Freeander. It is impossible to say that the seeds of the disease (inflammation of the lungs) which carried off the former in July, were *not* sown in course of duty, although there was no positive proof that such was the case; but it is consolatory to be able to declare with decision that the death of Mr. Freeander was in nowise connected with his arduous and energetically-performed work. He died of heat-apoplexy while returning by rail from casual leave.

Subordinate Reports.

69. The subordinate reports of the year contain, with two exceptions, presently to come under notice, nothing with which the time of higher authority need be taken up. The fact is, that as matter of novelty the subjects which fall to our officers to discuss have been written through. Even this Office now finds itself in yearly difficulties about producing what may be read without a wearisome sense of repetition. In the present year, the subordinate reports have been written on a defined plan, enforcing discussion of subjects in a certain order, and reducing to tabulation much which has formerly been treated of in simple dissertation. The result has not in all cases been what could be wished. Some officers have overlooked provisions of the model supplied, and this latter may itself with advantage be in places recast. In the next series we may hope to obtain what shall satisfy all requirements, both of arrangement and information.

SUGGESTIONS.

Allotment of one day in each week for trial in Court of Customs cases.

70. The Assistant Commissioner has suggested that the work of this department would be much facilitated, and the time of its subordinates much economised, if one day of the week were set apart in all Criminal Courts for the hearing of Customs cases. Each officer would then know when to send up his departmental witnesses, with a much diminished chance of the labour of going being wasted. If the defendant or his witnesses were not present, our men could go about their duty, knowing on what fixed day to return. The day chosen might, of course, vary in different districts; but it would certainly be a point gained to have some one day fixed. If no objection is seen to exist on judicial or other considerations, Government might be disposed to order magistrates to come to an understanding at their own discretion as to the day chosen with the officers of Customs to whose circle their district belongs.

* This figure has purposely been kept within what a totalling of recorded work would expose.

71. It remains to describe the changes alluded to in pragraphs 24 and 32. It has been said that in Goruckpore, Ghazeepore, and Banda, seizures are few. In Allygurh, Cawnpore, and Jounpore (Customs Circles), on the contrary, we make many seizures; and in the two former more especially, the presence of large kharee works assures us that, to be really extinguishing the illicit manufacture of salt, we ought to be doing much more than we do. Strength against strength, we are in every way the weaker, and it is very desirable to add to the local executive. As it is, we are driven to a questionable alternative, that of refusing to license where seizures have been made. Now, seizures are not the object. We have never sought to make them for their own sake. Prevention, not punishment, is our real aim. The first essential is to produce an impression that the chances of evasion have turned against the makers of saline substances, and this can only be arrived at by adding to the numbers of those to whom the duty of prevention is confided. This seems feasible, as follows, under Rule 6 of G. O. No. 247A. of 15th November, 1861.

72. The Cawnpore and Banda Circles adjoin each other, and the latter is now known to be, in a Departmental sense, unimportant. Left even to itself, it would do less mischief to the salt revenue in a year than the district of Futtehpore—now a part of the Cawnpore Customs Circle—could effect in a week of the hot season. Basing my action on what has been suggested by Mr. Ray—with whom a change of the kind was personally considered, but postponed under pressure of various other work—I am about to transfer the Banda Deputy Inspector to Futtehpore, and to post *in that district* two-thirds of the existing Banda establishment, to which will be added one-third—or three kotegushts, three jemadars, and thirty-five peons—of the force now employed in Ghazeepore. This will still enable us to provide for the minor wants of the Banda Circle, which, as noted above, will do us no serious harm. We can always provide for issue of licenses to a few saline workers,* and if any of these take to illicit manufacture, we can attend to them when, without hampering their legitimate industry, we have broken the occupants of the kharee lands in Futtehpore and Cawnpore into obedience to law. From Goruckpore, will be transferred half of the establishment—or two kotegushts, two jemadars, and twenty-eight peons—to the Etah District, which forms a part of the Allygurh Circle, where they would be of essential service in supervising sulphate of soda works. Mr. Ray wished rather to strengthen Jounpore; but, by the beginning of the next working season, we look to having what are now some of the worst parts of that district under legalized salt manufacture, which will practically increase, by much more than the reinforcement, contemplated by the Assistant Commissioner, the strength of our existing local staff of preventives. The changes herein detailed, which have received the Commissioner's sanction, will entail beyond the expenditure of a few rupees for travelling allowance and conveyance of records, &c., nothing but what this Office can itself arrange; a little sifting and transfer from Cawnpore to Futtehpore of records affecting earlier seizures and issue of licenses; and an understanding with the Accountant-General as to the sums locally payable to establishments.

MENTION OF OFFICERS.

73. The following are the officers whom I consider to have done well in all respects, and specially to merit the commendation of Government, *viz.*, Messrs. R. M. Adam, G. A. Bradford, C. P. Ashton, and F. Hardingham. Messrs. Durant, MacCheane (a recent transfer from the Line), and Browne, have also done well.

74. Mr. Ray, Assistant Commissioner, has done much to signalize himself as one of the best and most reliable officers in the Department.

F. W. VERE,
Deputy Commissioner of Inland Customs.

* In 1868-69, there were working in the Banda Circle 148 crude saltpetre works, 5 saltpetre refineries, and 28 carbonate of soda (russee) works.

ANNEXURE A.

North-Western Provinces Report for 1868-69.

Months.	Collections for 1867-68.									Total 1867-68.			Total 1868-69.			Collections for 1868-69.									Increase.			Decrease.		
	Fees.			Fines on Factories and Sales.			Duty on Salt.									Fees.			Fines on Factories and Sales.			Duty on Salt.								
	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.	Rs.	As.	P.
April, ...	14,546	8	0	29	6	0	4,876	15	3	19,452	13	3	12,423	7	9	10,004	12	0	215	0	2	2,203	11	7	...			7,029	5	6
May, ...	1,639	0	0	2	0	0	5,508	12	8	7,149	12	8	3,014	7	0	331	8	0	20	12	3	2,662	2	9	...			4,135	5	8
June, ...	73	0	0	7	8	0	5,653	1	9	5,733	9	9	4,077	3	6	18	0	0	26	13	4	4,032	6	2	...			1,656	6	3
July, ...	1,494	0	0	11	10	3	3,241	0	11	4,746	11	2	4,587	9	6	1,823	0	0	61	4	0	2,703	5	6	...			159	1	8
August, ...	968	0	0	16	8	0	1,612	15	0	2,597	7	0	2,623	14	3	1,034	0	0	12	10	3	1,577	4	0	26	7	3	...		
September, ...	570	0	0	10	0	0	1,259	11	5	1,839	11	5	2,488	5	6	493	0	0	7	7	0	1,987	14	6	648	10	1	...		
October, ...	730	0	0	8	0	0	2,311	13	9	3,049	13	9	5,062	5	2	2,628	8	0	7	5	2	2,426	8	0	2,012	7	5	...		
November, ...	3,168	8	0	0	8	0	1,657	6	3	4,826	6	3	6,590	11	3	3,925	8	0	211	6	11	2,453	12	4	1,764	5	0	...		
December, ...	3,994	8	0	2	15	9	1,847	3	6	5,844	11	3	5,502	11	5	3,015	8	0	0	8	0	2,486	11	5	...			341	15	10
January, ...	4,227	0	0	9	7	1	1,943	4	8	6,179	11	9	7,714	4	6	4,947	0	0	2	0	0	2,765	4	6	1,534	8	9	...		
February, ...	8,645	8	0	155	10	10	3,019	14	5	11,821	1	3	6,539	0	4	3,852	0	0	1	6	0	2,685	10	4	...			5,282	0	11
March, ...	10,787	0	0	7	12	0	2,997	4	0	13,792	0	0	20,166	0	4	13,314	4	0	1	7	0	6,850	5	4	6,374	0	4	...		
Total, ...	50,843	0	0	261	5	11	35,929	7	7	87,033	13	6	80,790	0	6	45,387	0	0	568	0	1	34,835	0	5	12,360	6	10	18,604	3	10
Deduct Increase, ...	...			...			...			...			...			...			...			...			...			12,360	6	10
Net Decrease, ...	...			...			...			...			...			...			...			...			...			6,243	13	0

F. W. VERE,
Deputy Commissioner of Inland Customs.

APPENDIX I.
INTERNAL DEPT.,
N.-W. P.

ANNEXURE B.

Annual Comparative Statement of Departmental Collections for 1868-69 *by Circles.*

Names of Customs Circles.	Amount of collections in 1867-68.	Amount of collections in 1868-69.	Increase.	Decrease.
	Rs. As. P.	Rs. As. P.	Rs. As. P	Rs. As. P.
Agra, ...	1,719 15 1	1,691 10 7	...	28 4 6
Allygurh, ...	18,204 5 2	19,254 12 5	1,050 7 3	...
Boolundshuhur, ...	2,048 5 2	1,972 3 7	...	76 1 7
Budaon, ...	2,908 12 7	2,875 1 0	...	33 11 7
Mynpoorie, ...	3,577 13 10	4,682 8 4	1,104 10 6	...
Furruckabad, ...	17,613 10 8	17,038 2 7	...	575 8 1
Cawnpore, ...	20,224 1 0	15,465 11 5	...	4,758 5 7
Allahabad, ...	7,051 11 6	5,495 13 5	...	1,555 14 1
Banda, ...	2,009 9 11	1,450 10 6	...	558 15 5
Jounpore, ...	5,074 11 6	3,204 5 7	...	1,870 5 11
Ghazeepore, ...	5,743 11 2	5,919 14 11	176 3 9	...
Goruckpore, ...	857 1 11	1,739 2 2	882 0 3	...
Total, ...	87,033 13 6	80,790 0 6	3,213 5 9	9,457 2 9
Deduct Increase, ...	...	...	...	3,213 5 9
Net Decrease, ...	...	...	...	6,243 13 0

F. W. VERE,
Deputy Commissioner of Inland Customs.

ANNEXURE C.

Memo. of Salt destroyed as impure by Circles.

Names of Circles.	1865-66.	1866-67.	1867-68.	1868-69.
	Mds. S. C.	Mds. S. C.	Mds. S. C.	Mds. S. C.
Agra, ...	29 24 0	590 13 0	292 38 14	149 34 5
Allygurh, ...	...	...	...	...
Boolundshuhur, ...	9 20 0	...	0 30 0	...
Budaon, ...	60 32 8	...	3 30 0	3 34 8
Mynpoorie, ...	...	...	...	...
Furruckabad, ...	234 32 8	144 28 4	138 22 0	98 5 0
Cawnpore, ...	17 33 0	...	23 30 0	19 13 0
Allahabad, ...	...	131 29 8	0 17 0	...
Banda, ...	28 19 0	...	...	...
Jounpore, ...	1 0 0	3 15 12	...	...
Ghazeepore, ...	...	...	...	2 8 13
Goruckpore, ...	6 15 5	4 34 0	26 14 8	98 14 0
Total, ...	388 16 5	875 0 8	486 22 6	371 29 10

F. W. VERE,
Deputy Commissioner of Inland Customs.

ANNEXURE D.

LICENSES ISSUED IN 1867-68.									LICENSES ISSUED IN 1868-69.								
No. and Description of Works in 1867-68.	Fees.	Duplicate Licenses.	Fees.	Total. No. of Licenses issued.	Total. Fees.	No. and Description of Works in 1868-69.	Fees.	Duplicate Licenses.	Fees.	Total. No. of Licenses issued.	Total. Fees.	Increase. No. of Licenses.	Increase. Fees.	Decrease. No. of Licenses.	Decrease. Fees.
	Rs. As. P.		Rs. As. P.		Rs. As. P.		Rs. As. P.		Rs. As. P.		Rs. As. P.		Rs. As. P.		Rs. As. P.
3615 Crude Saltpetre Works, ...	7,230 0 0	19	9 . 8 0	3,634	7,239 8 0	4,972	9,944 0 0	40	20 0 0	5,012	9,964 0 0	1,378	2,724 8 0	...	...
2205 Sujjee, Do., ...	4,410 0 0	7	3 8 0	2,212	4,413 8 0	760	1,520 0 0	...	...	760	1,520 0 0	...	...	1452	2,893 8 0
245 Russee, Do., ...	490 0 0	...	...	245	490 0 0	264	528 0 0	...	...	264	528 0 0	19	38 0 0	...	...
1298 Kharee, Do., ...	32,450 0 0	...	...	1,298	32,450 0 0	1,040	26,000 0 0	4	25 0 0	1,044	26,025 0 0	...	...	254	6,425 0 0
7363 Total, ...	44,580 0 0	26	13 0 0	7,389	44,593 0 0	7,036	37,992 0 0	44	45 0 0	7,080	38,037 0 0	1,397	2,762 8 0	1706	9,318 8 0
Deduct Increase, ...	...	...	...	...	...	...	...	...	...	...	...	...	...	1897	2,762 8 0
Net Decrease, ...	...	...	...	...	...	...	...	...	...	...	...	...	...	309	6,556 0 0
127 Refineries, ...	6,350 0 0	...	...	127	6,350 0 0	145	7,250 0 0	...	...	145	7,250 0 0	18	900 0 0	Deduct	900 0 3
															*5,656 0 0
Grand Total of Crude and Refineries, ...	...	...	...	...	*50,943 0 0	...	...	...	...	...	*45,287 0 0	...	...	...	...

* These figures differ by Rs. 100 from those given in the Table to para. 3 and by Rs. 200 from those in para. 8 in which the former sum, properly belonging to 1867-68 was by a clerical error, obliged to be shown in the realizations of the present year.

F. W. VERE,

Deputy Commissioner of Inland Customs.

APPENDIX I.
INTERNAL DEPT.,
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ANNEXURE E.

Names of Circles.	Description of Works.	1867-68.				Total.		1868-69.				Total.		Increase.		Decrease.	
		Number of Licenses.	Fees.	Number of Duplicate Licenses.	Fees.	Licenses.	Fees.	Number of Licenses.	Fees.	Number of Duplicate Licenses.	Fees.	Licenses.	Fees.	Number of Licenses.	Fees.	Number of Licenses.	Fees.
			Rs. As. P.		Rs. As. P.		Rs. As. P.		Rs. As. P.		Rs. As. P.		Rs. As. P.		Rs. As. P.		Rs. As. P.
Agra, ...	Crude Saltpetre,	96	192 0 0	2	1 0 0	98	193 0 0	212	424 0 0	2	1 0 0	214	425 0 0	116	232 0 0	...	...
	Russee, ...	2	4 0 0	...	...	2	4 0 0	...	...	...	...	...	...	...	...	2	4 0 0
	Kharee, ...	10	250 0 0	...	...	10	250 0 0	4	100 0 0	...	...	4	100 0 0	...	...	6	150 0 0
		108	446 0 0	2	1 0 0	110	447 0 0	216	524 0 0	2	1 0 0	218	525 0 0	116	232 0 0	8	154 0 0
	Refineries, ...	8	400 0 0	...	...	8	400 0 0	8	400 0 0	...	...	8	400 0 0	...	...	...	...
		...	...	...	...	...	847 0 0	...	..	...	...	...	925 0 0	116	232 0 0	8	154 0 0
Allygurh, ...	Crude Saltpetre,	438	876 0 0	3	1 8 0	441	877 8 0	604	1,208 0 0	8	4 0 0	612	1,212 0 0	171	334 8 0	...	...
	Russee, ...	24	48 0 0	...	...	24	48 0 0	...	...	...	...	...	...	...	...	24	48 0 0
	Kharee, ...	413	10,325 0 0	...	...	413	10,325 0 0	466	11,650 0 0	2	12 8 0	468	11,662 8 0	55	1,337 8 0	...	...
		875	11,249 0 0	3	1 8 0	878	11,250 8 0	1,070	12,858 0 0	10	16 8 0	1,080	12,874 8 0	226	1,672 0 0	24	48 0 0
	Refineries, ...	30	1,500 0 0	...	...	30	1,500 0 0	33	1,650 0 0	...	...	33	1,650 0 0	3	150 0 0	...	...
		...	...	...	...	...	12,750 8 0	...	...	...	...	...	14,524 8 0	...	1,822 0 0	...	48 0 0
Boolundshuhur, ...	Crude Saltpetre,	61	122 0 0	...	...	61	122 0 0	73	146 0 0	...	...	73	146 0 0	12	24 0 0	...	...
	Kharee, ...	59	1,475 0 0	...	...	59	1,475 0 0	61	1,525 0 0	...	...	61	1,525 0 0	2	50 0 0	...	...
		120	1,597 0 0	...	...	120	1,597 0 0	134	1,671 0 0	...	...	134	1,671 0 0	14	74 0 0	...	...
	Refineries, ...	2	100 0 0	...	...	2	100 0 0	2	100 0 0	...	...	2	100 0 0	...	...	...	...
		...	...	...	...	...	1,697 0 0	...	...	...	...	...	1,771 0 0	...	74 0 0	...	...

| | | |

ANNEXURE E.—(*Concluded.*)

Names of Circles.	Description of Works.	1867-68.					1868-69.					Total.			Increase.			Decrease.		
		Number of Licenses.	Fees.		Number of Duplicate Licenses.	Fees.		Number of Licenses.	Fees.		Number of Duplicate Licenses.	Fees.		Licenses.	Fees.		Number of Licenses.	Fees.		Number of Licenses.	Fees.	
			Rs.	As. P.		Rs.	As. P.		Rs.	As. P.		Rs.	As. P.		Rs.	As. P.		Rs.	As. P.		Rs.	As. P.
Allahabad,	Crude Saltpetre,	483	966	0 0	1	0	8 0	380	760	0 0	5	2	8 0	385	762	8 0	...	...		99	204	0 0
	Sujjee, ...	2	4	0 0	...	...		4	8	0 0	...	...		4	8	0 0	2	4	0 0	...	...	
	Kharee, ...	103	2,575	0 0	...	...		49	1,225	0 0	...	...		49	1,225	0 0	...	...		54	1,350	0 0
		588	3,545	0 0	1	0	8 0	433	1,993	0 0	5	2	8 0	438	1,995	8 0	2	4	0 0	153	1,554	0 0
	Refineries, ...	9	450	0 0	...	...		9	450	0 0	...	...		9	450	0 0	...	...		...	...	
		...	...		...	...		...	...		...	...		...	2,445	8 0	2	4	0 0	...	1,554	0 0
Banda,	Crude Saltpere,	120	240	0 0	...	...		148	296	0 0	...	...		148	296	0 0	28	56	0 0	...	...	
	Russee, ...	28	56	0 0	...	...		28	56	0 0	...	...		28	56	0 0	...	...		...	...	
		148	296	0 0	...	...		176	352	0 0	...	...		176	352	0 0	28	56	0 0	...	...	
	Refineries, ...	8	400	0 0	...	...		5	250	0 0	...	...		5	250	0 0	...	...		3	150	0 0
		...	...		...	...		...	...		...	...		...	602	0 0	...	56	0 0	...	150	0 0
Jounpore,	Crude Saltpetre,	207	414	0 0	2	1	0 0	209	415	0 0	2	1	0 0	325	647	0 0	116	232	0 0	...	...	
	Sujjee, ...	1,410	2,820	0 0	4	2	0 0	1,414	2,822	0 0	...	...		180	360	0 0	...	...		1,234	2,462	0 0
	Russee, ...	3	6	0 0	...	...		3	6	0 0	...	...		...	...		...	...		3	6	0 0
	Kharee, ...	43	1,075	0 0	...	...		43	1,075	0 0	1	6	4 0	63	1,556	4 0	20	481	4 0	...	...	
		1,663	4,315	0 0	6	3	0 0	1,669	4,318	0 0	3	7	4 0	568	2,563	4 0	136	713	4 0	1,237	2,468	0 0
	Refineries, ...	4	200	0 0	...	...		4	200	0 0	...	...		3	150	0 0	...	...		1	50	0 0
		...	...		...	...		...	4,518	0 0	...	...		...	2,713	4 0	...	713	4 0	...	2,518	0 0

GHAZEEPORE,	Crude Saltpetre,	513	1,026 0 0	1	0 8 0	514	1,026 8 0	871	1,742 0 0	5	2 8 0	876	1,744 8 0	362	718 0 0	...	...
	Sujjee, ...	793	1,586 0 0	3	1 8 0	796	1,587 8 0	567	1,134 0 0	...	...	567	1,134 0 0	...	...	229	453 8 0
	Kharee, ...	24	600 0 0	...	...	24	600 0 0	24	600 0 0	...	...	24	600 0 0	...	...	...	...
		1,330	3,212 0 0	4	2 0 0	1,334	3,214 0 0	1,462	3,476 0 0	5	2 8 0	1,467	3,478 8 0	362	718 0 0	229	453 8 0
	Refineries, ...	12	600 0 0	...	...	12	600 0 0	17	850 0 0	...	...	17	850 0 0	5	250 0 0	...	...
		...	...	...	...	...	3,814 0 0	...	...	...	...	...	4,328 8 0	...	968 0 0	...	453 8 0
GORUCKPORE,	Crude Saltpetre,	96	192 0 0	1	0 8 0	97	192 8 0	520	1,040 0 0	3	1 8 0	523	1,041 8 0	426	849 0 0	...	...
	Refineries, ...	3	150 0 0	...	...	3	150 0 0	3	150 0 0	...	...	3	150 0 0	...	...	...	...
		...	...	...	...	...	342 8 0	...	...	...	1 8 0	...	1,191 8 0	...	849 0 0	...	...
TOTAL, ...	Crude Saltpetre,	3,615	7,230 0 0	19	9 8 0	3,634	7,239 8 0	4,972	9,944 0 0	40	20 0 0	5,012	9,964 0 0	1,378	2,724 8 0	...	...
	Sujjee, ...	2,205	4,410 0 0	7	3 8 0	2,212	4,413 8 0	760	1,520 0 0	...	...	760	1,520 0 0	...	...	1,452	2,893 8 0
	Russee, ...	245	490 0 0	...	...	245	490 0 0	264	528 0 0	...	...	264	528 0 0	19	38 0 0	...	...
	Kharee, ...	1,298	32,450 0 0	...	...	1,298	32,450 0 0	1,040	26,000 0 0	4	25 0 0	1,044	26,025 0 0	...	...	254	6,425 0 0
	Total, ...	7,363	44,580 0 0	26	13 0 0	7,389	44,593 0 0	7,036	37,992 0 0	44	45 0 0	7,080	38,037 0 0	1,397	2,762 8 0	1,706	9,318 8 0
	Refineries, ...	127	6,350 0 0	...	...	127	6,350 0 0	145	7,250 0 0	...	...	145	7,250 0 0	18	900 0 0	...	...
	GRAND TOTAL, ...	...	...	...	...	...	50,943 0 0	...	...	...	...	...	45,287 0 0	...	...	...	...
		Deduct fees in Cawnpore Circle, ...					100 0 0	Add all fees in Cawnpore Circle, ...					100 0 0	...		...	...
							50,843 0 0						45,387 0 0	Net Increase Rs, ...			5,456 0 0

F. W. VERE,

Deputy Commissioner of Inland Customs.

ANNEXURE F.

Licenses of both Letters refused.

Name of Circle.	A.	B.
Agra, ...	13	...
Allygurh, ...	20	...
Boolundshuhur,...	7	...
Budaon, ...	21	...
Mynpoorie, ...	129	...
Furruckabad, ...	126	3
Cawnpore, ...	80	...
Allahabad, ...	84	...
Banda, ...	7	...
Jounpore, ...	25	...
Ghazeepore, ...	248	...
Goruckpore, ...	13	...
Total, ...	773	3

F. W. VERE,
Deputy Commissioner of Inland Customs.

ANNEXURE G.

Seized for working without Licenses.

	Cases.		Men.		Committed for trial. Cases.		Men.	
	1867-68.	1868-69.	1867-68.	1868-69.	1867-68.	1868-69.	1867-68.	1868-69.
Agra, ...	3	3	4	7	3	2	4	5
Allygurh, ...	...	3	...	7	...	...	...	...
Boolundshuhur, ...	4	...	4	...	2	...	2	...
Budaon, ...	2	2	5	5	1	2	1	4
Mynpoorie, ...	6	20	12	37	5	16	11	33
Furruckabad, ...	7	8	13	11	6	5	12	8
Cawnpore, ...	9	4	36	8	3	3	23	6
Allahabad, ...	35	14	45	42	26	14	35	42
Banda, ...	10	1	11	3	5	1	6	3
Jounpore, ...	11	6	15	12	3	3	3	5
Ghazeepore, ...	11	16	12	45	6	8	6	23
Goruckpore, ...	2	...	2	...	2	...	2	...
Total, ...	100	77	159	177	62	54	105	129

F. W. VERE,
Deputy Commissioner of Inland Customs.

APPENDIX II.

Review of the Administration of the Oudh Section of the Internal Branch of the Department of Inland Customs for the Official year 1868-69.

INTERNAL DEPT., OUDH.
Internal economy.

1. The internal economy of the Oudh Customs remains almost identically as in 1867-68. Under Orders of the Government of India, dated 2nd September, 1868, its executive has been to a small extent increased, and now comprises 296 officers and men.*

FINANCIAL RESULTS.
GROSS REALIZATIONS; decrease as compared with 1867-68.

2. Receipts of 1868-69 from all sources amount to Rs. 11,231-9-10, against Rs. 11,982-5-1 of 1867-68; a decrease of Rs. 750-11-3, or 6·25 per cent.

3. The following table gives details of realization under each heading, as compared with corresponding items in 1867-68, and in two preceding twelve-monthly periods:—

Year.	Fees on Licenses.	Fines and Confiscations.	Duty on Salt.	Total.
	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.
1868-69, ...	2,440 0 0	15 0 0	8,776 9 10	11,231 9 10
1867-68, ...	3,821 8 0	67 14 11	8,092 14 2	11,982 5 1
Corresponding 12 months of 1866-67, ...	3,939 0 0	6 0 0	10,708 5 10	14,653 5 10
Ditto ditto, 1865-66, ...	4,849 8 0	88 3 8	22,962 7 1	27,900 2 9

Collections analyzed *month by month;*

4. Annexure A., under the above headings, gives a *résumé* of collections, month by month, for the current official year and for 1867-68. This form reveals conditions very closely coincident with those apparent in the North-Western Provinces, *viz.*, a distinct downward tendency in the earlier months, lessening in July and August, with a revulsion and upward tendency in the later months of the year.

and by Circles.

5. Annexure B., shows the collections in each circle for the two years above named. Three circles—Lucknow, Roy Bareilly, and Baraitch—have small increases (that in Roy Bareilly being nominal); Hurdui and Pertabgurh have decreased by sums counterbalancing the increased realizations of the other circles.

Detail of salt destroyed.

6. The quantity of salt destroyed during the year as too impure for sale, is so small (less than four maunds) as to call for no notice.

Decline of trade in saltpetre, *entailing decrease of Departmental receipts.*

7. In Oudh, as in the North-Western Provinces, saltpetre trade has declined step by step with lessening demand in Calcutta; but in the former Province, that trade was mostly in the hands of one great capitalist, whose bankruptcy, in 1865-66, brought it very near to total extinction. There, is however, little difference in *percentage* of decrease, which in Oudh is 6·25, and 7·17 in the North-West. In Oudh, also, precisely as in the North-West, as soon as prices of refined saltpetre began to rise, the local refineries began to work more briskly, turning out more salt, and yielding more duty. Thus, in Oudh, as in the North-West, the ability of the Customs to provide for more or less of its own expenditure, hangs, not on any local condition, but on the state of the Calcutta saltpetre market.

* Exclusive of the Assistant Commissioner, his Office, and 35 Mooshriffs (Excise Agents). The figures in the text show the *preventive* strength.

Analysis of receipts.

Percentages of decrease or increase.

8. Analysis of the income of the year shows the receipts as license-fees to be less by Rs. 1,381-8-0, or 33·28 per cent., than those of 1867-68. Duty on salt is more by Rs. 683-11-8, or 8·44 per cent., than that for the former year. Fines and confiscations, always petty items, are Rs. 52-14-11, or 77·61 per cent., in arrear. But, as in the North-Western Provinces the receipts as duty on salt for the last half of the year were 42 per cent. in advance of those for the corresponding months of 1867-68, so in Oudh, a similar comparison gives 36·13 per cent. in favour of the latter half of 1868-69. Thus, in both Provinces, the same influence—a distinct advance in price in the Calcutta saltpetre market—has, in varying degree, produced a similar and marked influence on the income of the year.

Increase in duty on salt.

Cause.

Loss in Fees.

Cause.

9. Our loss on license-fees is the result of our own defensive action. We have refused licenses where seizures have been effected. We could at any time produce an increase under this heading, but to do this for its own sake would be simple breach of trust; for in the saliferous tracts with which we have to deal, the sure result of a liberal issue of licenses, no matter under what name the factory were disguised, would be an uncontrollable illicit production of salt. And in the year under review we have acted deliberately on a fixed principle, *viz.*, refusal wherever during the preceding year a seizure had been effected. No better lesson can possibly be read to the people with whom we are concerned. Fines may be and *are* paid; the profits of a term of impunity may cover, with more or less margin of profit according as the fines are large or small, the losses which follow on detection. Prosecutions, too, have their own disadvantages. If fines are not paid, the jails are crowded; Government pays again for having its law broken; and a prejudice not unfrequently arises against the Department merely for doing its duty. But there is no getting over the cold pressure of a refusal to license; and the penalty which it carries has this great recommendation, of falling only on those who have earned it. At the same time, it may palpably be overdone; and, in the hope that the specimen of what the Department, if pushed to extremity can do may serve as a warning, it is my intention now to refuse licenses only in special cases. With our numerous Departmental releases, this will materially lessen the cases in which we shall henceforward as a rule refuse; and the knowledge of the power remaining in our hands will, it may be hoped, spare us the necessity of frequently exercising it.

Proximate re-opening of salt works.

Advantage which the Department will derive.

10. Moreover, under the determination of Government to attempt the local manufacture of salt, the Departmental position will be by so much improved that some of the tracts, now most dangerous, will, by the time the next working season is on, be in legalized activity, while in those engaged in the new industry, among whom we now count our worst antagonists, we shall then have, for everything outside their own boundaries, interested allies.

CHARGES.

11. The year's charges are Rs. 56,627-9-10, details of which, as also of the three preceding twelve months (1st April to 31st March), are presented in the following table:—

Year.	Fixed.				Contingencies.							
	Supervision.	*Prevention.*										
	Assistant Commissioner and Office.	Officers, Deputy Inspectors, and Sub-Deputy Inspectors.	Men.	Total of Fixed.	Travelling Allowance other than that fixed for Deputy Inspectors.	Pay of Peons sick in hospital.	Postage Labels.	Dieting of Prisoners.	Half Fines, as per sentences of Courts.	Miscellaneous.	Total of Contingencies.	Grand Total of Charges.
	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	...	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.
1868-69, ...	9,413 9 10	22,838 1 7	19,478 12 10	51,730 8 3	2,718 11 3	...	698 4 0	8 3 3	512 11 5	959 3 8	4,897 1 7	56,627 9 10
1867-68, ...	9,409 7 10	21,900 13 3	19,431 10 10	50,741 15 11	1,297 12 2	...	814 0 0	2 3 0	644 12 7	663 14 0	3,422 9 9	54,164 9 8
Corresponding 12 months of 1866-67, ...	9,983 6 7	20,896 11 8	19,562 6 11	50,442 9 2	1,587 0 0	...	625 8 0	1 9 4	784 14 0	839 1 0	3,838 0 4	54,280 9 6
Ditto 1865-66,	11,401 4 2	19,990 15 6	21,246 6 2	52,638 9 10	1,741 11 4	...	...	...	1,508 0 10	942 0 9	4,191 12 11	56,830 6 9

RESULTS OF COMPARISON. Percentages on gross expenditure of 1867-68.

12. The charges of 1868-69 have exceeded those of 1867-68 by Rs. 2,463-0-2, or 4·54 per cent., of which Rs. 988-8-4, or 1·82 per cent., are debitable to fixed, and Rs. 1,474-7-10, or 2·72 per cent., to contingent expenditure.

Fixed charges compared.

Percentages,

Cause of increase.

13. The addition to fixed charges, 1·94 per cent. on the corresponding item in 1867-68, is due to periodical increments received by Deputy Inspectors, and to the increases of force, and the generally enhanced scale of salaries sanctioned by the Government of India in its Order, dated 2nd September, 1868.

14. The considerable increase in contingent charges (43·10 per cent. on the item for 1867-68) is mainly due to the larger sum charged for travelling allowance, which is Rs. 1,420-15-1 in advance of the corresponding outlay in the preceding year. The cause has been that the Assistant Commissioner has drawn this allowance on the scale sanctioned for covenanted servants. Expenditure on postage labels shows a decrease of Rs. 116-4-0, a fluctuation which in any year may turn either way. The small increase of Rs. 6-0-3 for dieting prisoners requires no notice. Shares of fines, less by Rs. 132-1-2, have followed the yearly lessening number of criminal prosecutions. And in miscellaneous charges, out of the increase of Rs. 295-5-8, Rs. 125 went in rewards paid for fidelity, and bravery displayed by a party of our men, savagely assaulted while in the execution of their duty. Printing charges, &c., made up the balance.

Comparison of 1868-69 charges, with those of 1866-67 and 1865-66.

Fixed.

15. Comparing charges of 1868-69 with those of the two years preceding 1867-68, the decreases apparent in fixed charges under the heading "Assistant Commissioner and Office" are due to transfer to the North-Western Provinces of charges (salaries of hands in this Office) borne in the first instance by Oudh. This transfer took place in 1866-67. The increase under the heading "Officers" has been due to periodical increases of salary granted under the old system, now abandoned under recent orders. Decreases under the head "Men" is mainly due to the yearly growing number of subordinates who take leave during the slack season, and whose places are allowed to remain vacant.

Contingent.

16. Among contingencies, the decrease in seizure shares, apparent on comparison of those of 1868-69, with those of 1865-66, alone seems to require notice. The fact is, that in the earlier year we prosecuted more persons, and had of course more prize-money to pay.

NET EXPENDITURE.

17. Deducting realizations from charges, the net expenditure of the Department in Oudh has amounted to Rs. 45,396. The subjoined table will show how this compares with the results of preceding years :—

Compared with that of three years preceding.

Year.	Gross Expenditure.	Realizations.	Net Expenditure.	Net Expenditure per Mensem.	Percentage of Gross Expenditure on Income.
	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	
1868-69, ...	56,627 9 10	11,231 9 10	45,396 0 0	3,783 0 0	504·20
1867-68, ...	54,164 9 8	11,982 5 1	42,182 4 7	3,515 3 0	452·04
Corresponding twelve months of 1866-67, ...	54,280 9 6	14,653 5 10	39,627 3 8	3,302 4 4	370·43
Ditto ditto, of 1865-66, ...	56,830 6 9	27,900 2 9	28,930 4 0	2,410 13 8	203·69

Percentages of cost and realization.

Cost in Oudh

higher than in N.-W. P.

Saltpetre trade has suffered more.

18. In respect to the results above displayed, it will not escape attention that, while the cause of diminished realizations is precisely the same in Oudh as in the North-Western Provinces, the percentage of cost on realizations has mounted much more rapidly in the former than in the latter. In reality, the saltpetre trade (our one source of direct internal revenue) has suffered much more in Oudh

than elsewhere. The reason has already frequently been stated. The trade was once *de facto* and *de jure*, and always practically, a monopoly, and the collapse of the credit of Shah Mukkund Lall, its last holder, was a blow all but mortal. In the North-West we have had only decline of external demand to contend against, and although the result has been sufficiently disastrous, it has not attained the same proportions as in Oudh. And, as the executive had other and more important and more arduous duties to perform, in addition to supervision of saltpetre manufacture, the decline of that particular industry afforded no opportunity of diminishing its numbers; rather, indeed, in some ways additions to its expenditure have had to be endured, and thus, the percentage of outlay has come to be considerably raised. Just now, the local industry is slightly reviving, but there is as yet no certainty that the unmistakable improvement of the last six months will be permanent.

Cost of executive cannot proportionately be lessened.

19. The distinction between the direct pecuniary returns of this branch of the Customs, and its value to the State, is now too well recognized for illustration to be necessary. I will merely permit myself to quote from paragraph 20 of my North-Western Report:—

Real utility of establishment.

"The real use, then, of the branch is, not as an agency of receipt, but in its character of an agency of insurance against losses, impossible to calculate with nicety, but difficult to overrate."

ISSUE OF LICENSES.

20. Annexure C. shows the issue of licenses, and their increase or decrease by circles.

21. Annexure D. gives the number of cases in which licenses were refused. In future Annual Reports, the greater detail furnished in the annexures devoted to these subjects in the North-Western Report will be reproduced for Oudh.*

GENERAL DECREASE.

22. It will be seen that there has been a general decrease, and deducting the 200 refusals of crude licenses, which class alone needs discussion, and allowing 18 for decreases of kharee and sujjee works, it will be seen that 406—which make up the balance of difference with last year's issue—are to be put down to the decline of saltpetre trade, which, as shown in paragraph 18, has been more marked in Oudh than elsewhere. Stoppage, probably from want of capital, of three refineries of saltpetre has contributed to the downward movement.

Causes.

Cases of working without license.

23. Annexure E. shows the number of instances in which factories were seized for working without licenses. The figures are not large: 25 men seized in 1868-69, against 42 in 1867-68; and 20 prosecuted, against 27. No discussion here seems requisite.

ILLICIT MANUFACTURE OF SALT believed by the Assistant Commissioner to have increased.

24. The Assistant Commissioner looks on the illicit manufacture of salt as now distinctly increasing in Oudh; and considers the relaxations introduced under sanction of the Chief Commissioner to be the mainspring of this retrogressive movement. Figures, hereinafter presented, go to show that a certain increase has occurred, but it is needless to occupy the time of superior authority with any lengthy dissertation. Everybody knew, when these relaxations (adopted in Oudh from G. O., North-Western Provinces, No. 152A., of the 9th October, 1867) were advised, that in tracts highly saliferous some increase of illicit production was likely to result; but the question was, was it not better to risk, or even to accept this, than to continue to prosecute enormous numbers of persons for offences, almost nominal in degree, and offences at all only from a point of view strictly legal. The administration in Oudh was believed to accept with some reluctance the inevitable result of carrying out the Salt Laws in their rigour. Bearing in mind that our great test, the Line income, gives us no reason to think that, in the year

Is probably right as to the fact.

* In 1868-69, there were 135 kharee, 64 sujjee, and 346 crude saltpetre works in Oudh.

under review (the first complete year in which the relaxed rules have obtained), any important new source of internal supply has developed to our detriment, knowing, as even Mr. Hay bears witness, that the imports of taxed Western salt have been larger than usual, we are warranted in concluding that the impetus imparted to illicit manufacture (and that it *has* in a measure increased,* the figures before me prevent my pretending to ignore) has not extended to anything beyond the supply of the very immediate neighbours of the makers. After all, our officers are too vigilant, our men kept too well to their work, for anything on such a scale as would seriously affect the consumption of eight and a-half millions of population to be now possible.

but mistaken as to the degree.

His estimate of local illicit manufacture

is loose and unsound.

25. Mr. Hay thinks that a lakh and a quarter of maunds "at least" are now made in the Province, in which, prior to introduction of Notification No. 152A., "we had reduced the illicit manufacture to brine only." In other words, the effect of the change of system has, in eighteen months, been to raise illicit manufacture of salt from next to nothing *to nearly thirteen and a-half per cent., i. e,* to considerably more than one-eighth *of the consumption of the whole population of Oudh.*† Mr, Hay had, perhaps, not looked at this aspect of his computation. And the Assistant Commissioner thinks that, with the force at his disposal, "we are fortunate in keeping it so low." Either Mr. Hay is mistaken in his estimate, or he and his officers have simply grown useless; but, knowing them all to be hard-working and active, I prefer to think that he has greatly miscalculated, and preposterously overrated, the effect of the change of system. The fact is, that this change has never recommended itself to the Assistant Commissioner—it revolts all his honest prejudices as an old preventive officer; and these have led him into an estimate characteristically loose and unsound. More will be said on this subject of increasing illicit manufacture, when the penal action of the Department comes in question.

Circles where illicit manufacture most prevails.

26. Prevalent, more or less, in every circle into which the Province of Oudh has for Departmental purposes been divided, those of Roy Bareilly and Pertabgurh appear at present to possess the pre-eminence for petty illicit manufacture; although the site of the old Kutteearee salt and sulphate of soda manufactures, in Hurdui, and the saline deposits in the Lucknow Circle (where the largest seizures of the year have been made) are capable, if neglected, of causing enormous mischief. In Pertabgurh we have hitherto been unfortunate in our officers; one after another of whom has failed, in one way or other. After frequent changes, we seem at last, in Mr. Kenyon, to have secured at least all the personal energy necessary, and the aspect of things may be expected to improve. It is this circle which just now is the scene of the most obstinate petty illicit industry; and the Assistant Commissioner and his subordinates are, beyond dispute, working hard to keep it in check. Partial drought and large exports of grain, raising local prices and reacting naturally against all not engaged in the speculation, are said, and with apparent reason, to have tended to stimulate illicit manufacture, just as it may have fostered any other form of petty crime.

Castes who practise it.

27. In Oudh, as in the North-West, any man *may* without prejudice to his social status make salt, and, more or less, almost every caste has had its share in the work; but here, as elsewhere, the Noonneeahs are the leaders.

Suppressive measures.

Nothing additional needed.

Re-opening of salt works

28. No new suppressive measures appear needed; but the great experiment towards which this Office has been called to aid in devising a code of rules—of re-establishing legalized salt works—may be expected to prove a powerful auxiliary. Whatever its results, fiscal and financial, there can be little doubt that its early

* See, however, for the probable cause of this increase, *vide* para. 131 of the Commissioner's General Review.

† Population 83,26,647; estimated consumption, 4½ seers per head = 9,36,747 maunds.

tendency will be to lessen the temptation to illicit working; to draw into a legitimate channel the energies of some, and no inconsiderable fraction, of those who now seek to work in despite of us; to attach to us, by the bond of a common interest, some of those to whom we now, perhaps, seem to stand in the relation of natural enemies.

probably useful to the Department.

29. The penal action of the Department in the Province of Oudh is exhibited in the following tables, which show results over a series of four years:—

PENAL ACTION OF THE DEPARTMENT.

Name of Circle.	Cases of Seizure.				Quantity of Salt.				Men Seized.			
	1865-66.	1866-67.	1867-68.	1868-69.	1865-66.	1866-67.	1867-68.	1868-69.	1865-66.	1866-67.	1867-68.	1868-69.
					Mds. S. C.	Mds. S. C.	Mds. S. C.	Mds. S. C.				
Lucknow, ...	276	187	144	114	54 10 0½	29 36 12	39 10 15	71 4 11	698	380	190	185
Hurdui, ...	88	72	39	106	20 18 15	3 28 2	3 26 1	16 31 5	144	96	50	129
Roy Bareilly,	281	216	98	113	65 17 6	32 21 6	5 8 12	14 33 1	1,285	984	310	309
Pertaburh, ...	248	248	127	313	39 34 7½	36 36 5	22 5 13	63 2 1	954	855	435	583
Gondah, ...	75	60	44	48	3 17 3	1 37 3	1 28 2	2 36 15	107	71	50	50
Total, ...	968	783	452	694	183 18 0	104 39 12	71 39 11	168 28 1	3,188	2,386	1,035	1,256

Increase of seizures. Persons.

30. The number of persons who have come within the reach of the Departmental laws being the principal and most interesting feature, may claim precedence. Throughout the Province, 1,256 persons have *brought on themselves interference*, during the year, against 1,035 in 1867-68, an increase of 21·35 per cent; but the higher figure is itself 89·96 per cent. below the return of 1866-67, and 153·82 per cent. below that for 1865-66. Be it remembered that the above figures only represent the number of persons whom the Department has been obliged to subject to to *quasi*-judicial inquiry; those whom it has had to *prosecute* will come into question later on. Now the recent change has in nowise lessened the power of the Department to *investigate*, has not deprived it of its right to search even dwelling-houses at need; it is merely now bound not to *prosecute criminally* until a certain limit of production has been exceeded. And the above being the facts, if illicit manufacture of salt had really, in consequence of our relaxations, sprang suddenly from the minimum implied in restriction to production of brine to a lakh and a quarter of maunds in a year, is it credible that, with all his powers still about him, with his force as a matter of fact added to, with his suspicions thoroughly awake, and with the ruinous effect of a change, which he cordially disapproved, to expose, the Assistant Commissioner, and his officers, all his faithful adherents in opinion,* all as able to interfere as ever, should only have found justification for interference in the case of less than 40 per cent. of those who came under their observation in 1865-66? More salt has, undeniably, been made than in 1867-68; *that*, no one responsible for the facts has any inclination to deny; but these very figures of the Assistant Commissioner's own providing, go, when taken in conjunction with the undiminished powers of the force in regard to everything short of criminal process, to show that the change which he discountenances cannot possibly have had the effect ascribed to it.

Comparison of numbers *subjected to quasi-judicial proceeding.*

Departmental powers unimpaired.

An enormous increase of illicit manufacture, *should have led to proportionate increase of seizures.*

Real bearing of the known facts.

31. The return of salt seized during the year gives reason to suppose that more than usual has illicitly been made, for the total is 236·61 per cent. on that of 1867-68, 160·68 per cent. on that of 1866-67, and 92·34 per cent. on that of

Salt seized. *Quantity has increased,*

* Mr R. J. Whitten, who, for special cause, has written no report this year, may possibly be an exception.

but is still, in aggregate, small.

1865-66, in which year the largest number of persons came under Departmental interference. But after all, the aggregate seized (168 maunds) remains small; and with a force of nearly three hundred men (handled by officers who have undoubtedly worked hard), doing their best to detect infractions of law, it does seem preposterous in presence of such results, to talk of a sudden monopolization of the consumption of more than an eighth of the whole population as the result of a measure intended to relieve the poorer classes, and spare Government the necessity of invidious prosecutions. The increase in quantity of salt, although apparent more or less in every circle, shows mostly in that of Lucknow, which includes the highly saliferous district of Oonao. Pertabgurh is next in degree.

Increase, where most perceptible; *in salt,*

in persons.

32. The largest number of persons interfered with has been in Pertabgurh, Roy Bareilly following, Lucknow coming third. This argues comparative pettiness of manufacture in the two first-named circles; for while the number of persons seized in Pertabgurh and Roy Bareilly is 315 per cent. in the first, and 167 per cent. in the second, on the number captured in Lucknow, the quantity of salt seized in the latter is 112 per cent. on that taken in Pertabgurh, and 507 per cent. on what was seized in Roy Bareilly.

Inference.

Final deduction.

33. Differing, then, absolutely with the Assistant Commissioner, I argue from the premises above expressed in plain figures, that the illicit manufacture of salt is still being kept down to very harmless proportions in the Province of Oudh.

Year.	Total Number of Persons captured by the Department.	Released by Department.					Sent for Trial.	Absconded.	Acquitted.	Convicted.	Pending when Report was submitted.	Percentage of convictions on number of Persons sent for Trial, deducting those whose cases were still undecided.
		For making less than one seer.	Infirm Persons, Pregnant Women, or Minors.	On proof of ignorance or inadvertence.	For want of proof.	Under Departmental inquiry.						
1868-69 ...	1,256	528	3	...	111	15	599	...	93	486	20	83·93*
1867-68 ...	1,035	254	5	...	178	...	598	6	74	518	...	87·50†
1866-67 ...	2,386	...	3	2	319	...	2,062	7	400	1,655	...	80·53‡
1865-66 ...	3,188	...	5	...	354	...	2,829	...	460	2,369	...	83·73

* Deducting the 20 pending from the 599.
† Ditto 6 absconded ditto 598.
‡ Ditto 7 ditto ditto 2,062.
These two latter items were formerly erroneously classed among the year's Acquittals.

Persons seized, *how disposed of.* Releases and committals;

percentages.

34. The next table shows how the persons subjected, as shown in the preceding one, to *quasi*-judicial process, were subsequently dealt with. In 1868-69, out of 1,256 persons, 528, or 42·03 per cent., were released under G. O. No. 152A., of 9th October, 1867.§ In consideration of various infirmities, 3 persons, or 0·23 per cent., were set at liberty; and 111, or 8·83 per cent., discharged for want of competent proof. Thus, out of those, actually interfered with, 642, or 51·11 per cent., underwent no hardship beyond a Departmental inquiry; 599, or 47·68 per cent., were prosecuted; and 15, or 1·19 per cent., were, at the close of the year, still under Departmental investigation.

Prosecutions.

Percentages of convictions on committals.

35. Of the 599 persons prosecuted, 93, or 15·52 per cent., were acquitted; 486, or 83·93 per cent., *on ascertained decisions*, had been convicted; leaving, when the year closed, decisions unknown in respect to 20, or 3·33 per cent., of those sent for trial.

§ Less than one seer of salt having been seized.

36. This Office can never rest content, or cease to strive after higher figures, as long as the maximum of cent. per cent.—a conviction for every prosecution—has not been reached. That it will be very difficult to attain (*vide* paragraph 35 of my North-Western Report) is not a reason for abandoning the attempt. But as things are, the success arrived at will perhaps be accepted as fairly satisfactory. This Department stands practically, in relation to the Criminal Courts, in the position of a lower tribunal whose decision is appealed to one higher. It decides that persons are guilty; the Criminal Court by its sentence reverses or confirms that decision. It may be of interest to see how, thus viewed, our cases fare as compared with appeals from decisions of Criminal Courts to higher tribunals. An attempt is made to exhibit the facts in the following table:—

Results fairly satisfactory.

Acquittals of Customs cases.

Year.	Criminal cases appealed in Oudh.	Decisions of Lower Courts Reversed.	Percentage of Reversals.
1866	1,198	230	19·19
1867	1,413	238	16·84

Compared with results of appeals in criminal trials.

37. In the two last years of the Departmental history, it has lost 15·52 and 12·37 per cent. of its cases.

38. Remembering, as noted by the Commissioner of Customs, in para. 115, page 72 of his last year's Administration Report, that "the officers of our Department who commit these cases have no sort of legal training, and that the Courts are decidedly not unduly prejudiced in our favour," the inference then drawn by him appears still to hold, *viz.*, that our officers have been careful and mostly warranted in their committals.

39. The percentage of convictions is better in Oudh than in the North-West; so that, in this very important item of duty, the Customs officials of the former Province have taken precedence of their colleagues in the latter.

Percentage of convictions better in Oudh than in the North-Western Provinces.

40. Of the 486 persons convicted in 1868-69, 142, or 29·21 per cent. underwent imprisonment, and 344, or 70·78 per cent., paid fines aggregating Rs. 3,907-10-0, or an average of Rs. 11-5-9.

Results of convictions:
1868-69.
Numbers who underwent imprisonment or paid fines, with percentages;

41. Of the 518 persons convicted in 1867-68, 160, or 30·88 per cent., underwent imprisonment, and 358, or 69·11 per cent., paid fines aggregating Rs. 3,602-9-4, or an average of Rs. 10-1-0.

1867-68;

42. In 1866-67, out of 1,655 persons convicted, 324, or 19·57 per cent., suffered imprisonment, and 1,331, or 80·42 per cent., paid fines aggregating Rs. 10,217-5-9, or an average of Rs. 7-10-8.

1866-67;

43. And in 1865-66, out of 2,369 convicted, 871, or 36·76 per cent., were imprisoned, and 1,498, or 66·90 per cent., paid fines aggregating Rs. 14,715-10-3, or an average of Rs. 9-13-2.

1865-66.

44. Taking the average of the four years, we find that of those convicted 71·80 per cent. have paid fines, the incidence of which per head has been Rs. 9-5-8.

Averages of the four years.

45. With this in evidence, is there any escape from the conviction that those who have been found able *to pay* sums such as the really indigent classes never *possess* at one time, are far from belonging to the poorest class? *ergo*, nearly three-fourths of those whom we have punished in four out of the five years during which we have worked in Oudh, belong to classes relatively well-to-do. This conclusion accords completely with my own earlier experience as an executive officer.

Persons thus punished do not belong to the really indigent classes.

Year.	Imprisoned in Default of Payment of Fine.							Paid Fines.																	
	Number Imprisoned for 6 months.	Ditto above 3 months.	Above 2 months.	Above 1 month.	Above 15 days.	Above 10 days.	Below 10 days.	Total who underwent Imprisonment.	Above Rs. 100 and below Rs. 250.	Aggregate Paid.		Above Rs. 50 and below Rs. 100.	Aggregate Paid.		Above Rs. 30 and below Rs. 50.	Aggregate Paid.		Above Rs. 20 and below Rs. 30.	Aggregate Paid.		Above Rs. 10 and below Rs. 20.	Aggregate Paid.		Above Rs. 5 and below Rs. 10.	Aggregate Paid.		Below Rs. 5.	Aggregate Paid.		Total who paid Fines.	Aggregate Paid.	
										Rs.	As. P.		Rs.	As. P.		Rs.	As. P.		Rs.	As. P.		Rs.	As. P.		Rs.	As. P.			Rs.	As. P.
1868-69, ...	7	23	16	52	35	3	6	142	2	450	0 0	3	215	0 0	10	455	0 0	29	595	0 0	64	806	5 2	162	1,190	12 10	74	195	8 0	344	3,907	10 0
1867-68, ...	3	22	53	46	20	4	12	160	1	150	0 0	6	291	12 6	7	254	0 4	38	847	14 8	101	1,169	9 5	153	743	12 5	52	145	8 0	358	3,602	9 4
1866-67, ...	12	51	78	76	92	5	10	324	8	1,204	3 5	29	1,673	10 11	12	408	10 7	74	1,641	4 11	241	2,536	6 11	583	1,857	13 0	384	895	4 0	1,331	10,217	5 9
1865-66, ...	29	108	257	349	63	65	...	871	1	250	0 0	3	202	5 0	16	505	0 0	79	1,855	6 2	672	8,296	12 2	350	2,706	10 11	377	899	8 0	1,498	14,715	10 3

REMARKABLE CASES.

46. The following remarkable cases have occurred in the Province in connection with illicit manufacture of salt :—

Subordinate prosecuted for collusion.

47. A Jemadar was successfully prosecuted in the Pertabgurh Circle by the Department, for collusion, and sentenced to imprisonment for one year, with hard labour.

Subordinates assaulted in execution of duty.

48. A serious affray occurred in the same district, when a patrolling party of our men, after effecting a seizure, was assailed by a mob of villagers, whose object was to regain possession of the salt and utensils seized, manifestly to dispose of the circumstantial evidence against themselves. The Customs subordinates, although desperately outnumbered, did their duty and resisted. In the fight which ensued, *all* of our men were severely injured, and one of the assailants killed. Criminal process for murder was taken by the Police against our people.*

Affray; an assailant killed;

prosecution of Customs party.

But the Assistant Commissioner of Customs, feeling that the men had done no more than their duty, took up the matter energetically and judiciously, and brought his subordinates, with honour, through a formal trial for homicide. The evidence of the Civil Surgeon showed that the man who lost his life was slain by the stroke of a cutting weapon, and as none of the Customs party carried any offensive arm of the kind, but were proved to have defended themselves with lathees only, it became apparent that death had not resulted from *their* act. One of the assailants *was armed with a hatchet,* and the inference was that a random blow of this implement had killed the man. The upshot was acquittal of the whole of the Government servants, and punishment by the Court, after a protracted investigation (in which "a fair stage and no favour" was all the advantage our people obtained), of those who assaulted them in the execution of their duty. The position was in every way a trying one for the unfortunate subordinates, and it is satisfactory to think that they came out of it unscathed, and with credit. Rewards, aggregating Rs. 125, were Departmentally adjudged to them for the fidelity and bravery which they displayed.

Evidence of Civil Surgeon.

Proofs in favour of Customs party;

their aquittal;

punishment of their assailants.

Subsequent reward to Customs men.

MISCELLANEOUS.

Condition of the saltpetre trade.

49. For information on the condition and prospects of the saltpetre trade, I beg to refer to paragraph 45 of my accompanying North-Western Provinces' Report.

Outturn of salt from saltpetre refineries.

50. There has been a small increase, as compared with 1867-68, in the outturn of salt from saltpetre refineries as shown in the following table. The cause has been shown in paragraph 8 to be an improvement in the latter trade :—

Year.	Salt educed in Refierines.			Duty thereon at Rs. 3 per maund.		
	Mds.	S.	C.	Rs.	As.	P.
1868-69, ...	2,925	19	5	8,776	9	10
1867-68, ...	2,697	34	2	8,092	14	2

Refineries under contract.

51. No compositions under Section 7 of Act XXXI. of 1861 have ever been made in the Province. Local conditions are held to forbid them.

Importation of salt.

52. My information on the subject of import of salt is, this year, regretably incomplete. The Assistant Commissioner, devoting two paragraphs to the question, has contrived to write them without conveying any information whatever as to quantity. The returns from Furruckabad, which circle contains the two principal Western inlets, is scanty, extending over only six months, but it gives, for

Scantiness of information.

Imports into Western Oudh.

* Under most European Governments, an assault on a public servant justifies, in some even renders incumbent, the instant use of the weapon with which the State arms him for its service.

that space of time, a total of 1,45,918 maunds, so that little exaggeration is risked in computing the year's deliveries at 200,000 maunds, which is below the figure returned thence in 1867-68. But confining ourselves to what has been absolutely noted, we have an ascertained increase over the imports of last year, when, altogether, I traced 7,67,173 maunds into the Province. What we know to have gone in during this year is shown in the following table, with the comparative figures of last year :—

Year.	By Shahjehanpore and Furruckabad.	Across Cawnpore Bridge.	Eastern Salts.	Total.
	Mds.	Mds.	Mds.	Mds.
Quantities known to have entered. 1867-68, ...	2,31,000	5,36,173	50,000	8,17,173
1868-69, ...	1,45,918	6,89,425	...	8,35,343

Estimate.

53. Remembering that the Furruckabad figures are certainly under the mark, that nothing is above allowed for trade through Allahabad and Jounpore, we are very safe in accepting nine lakhs of maunds as the least which in 1868-69 can have gone into Oudh. Mr. Hay mentions, in general terms, that large importations have taken place in return for grain exported, and that Eastern salts have been completely floated out by the great current of Western import which has latterly set in.

Eastern salts expelled.

CONSUMPTION OF SALT.

54. All information on internal consumption of salt this year gathered, being epitomized in Appendix A. to the Report of the Commissioner, nothing needs here to be said.

ESTABLISHMENT CASUALTIES.

55. The casualties of the year are embodied in the following table, for all grades from Sub-Deputy Inspector to Peon :—

	Number of Each Rank and Grade.							Total Subordinate Establishment.	Percentage of Total of Casualties on Total of Establishment.
	Sub-Deputy Inspectors.	Mohurrirs.	Mooshriffs.	Kotegushts.	Jemadars.	Lance-jemadars and Peons.	Orderlies.		
Total Sanction, ...	14	11	35	19	20	207	20	326	
Died, ...	1	...	...	...	...	1	...	2	0·61
Dismissed, ...	1	6	3	3	5	55	...	73	22·39
Deserted, ...	...	...	...	1	1	1	...	3	0·92
Resigned, ...	...	2	1	1	3	15	...	22	6·75
Total of Casualties, ...	2	8	4	5	9	72	...	100	30·67

Health of force.

56. The health of the force, notwithstanding the exposure which it endures, has been first-rate, and the losses from death are but 0·61 per cent.

Dismissals,

57. The percentage of dismissals is excessive, exceeding by 6·49 per cent. that of 1867-68, and by 4·39 per cent. that of 1866-67.

ominously large.

58. The increase is perhaps not altogether disconnected with the absence of revision on my part of the decisions of the Assistant Commissioner where the lower grades are in question. If this goes on, it will become a matter for consideration whether I must not again accept appeals, even from peons. The change arose out of no attempt to lessen the labours of this Office, but in view to strengthening the hands of the local authority.

59. The recorded causes of dismissals are epitomized in the following table:— *Recorded causes.*

Causes.	Sub-Deputy Inspectors.	Moharrirs.	Mooshriffs.	Kotegushts.	Jemadars.	Lance-jemadars and Peons.	Total.
False reports, ...	1	...	...	...	1	7	9
Suspicion of bribery, ...	...	1	...	1	1	4	7
Unfitness for service, ...	...	4	1	1	...	7	13
Disgraceful conduct, ...	...	...	...	...	...	2	2
Neglect of duty, ...	...	...	1	1	...	8	10
Illegal process, ...	...	...	1	...	2	1	4
Cowardice, ...	...	...	...	...	...	1	1
False evidence in Court, ...	...	...	...	...	...	3	3
Disobedience and insubordination, ...	...	1	...	...	...	1	2
Breach of trust, ...	...	...	...	...	...	1	1
Immorality, ...	...	...	...	...	1	5	6
Unauthorized absence, ...	...	...	...	...	...	15	15
Total, ...	1	6	3	3	5	55	73

60. The item of unfitness for service has arisen principally out of the weeding of the force when increase of pay was sanctioned. But the same process had to be resorted to in the North-West, where the percentage of dismissals has lessened. A more liberal rule, recently introduced, in respect to rejoining from leave of subordinates, may be expected to lessen in future the number of dismissals for unauthorized absence. *Items in which decrease is probable.*

61. False reports, and suspected receipt of bribes—the most heinous of the recorded offences—have led respectively to 12·32 and 9·58 per cent. of the dismissals of the year. *Percentage of heinous offences.*

62. The following Departmental servants were punished by Criminal Courts during the year:— *Criminal prosecutions in the force.*

Name of Departmental Servants.	Grade.	Offence charged.	Sentence.	Whether Appealed or not.	Result of Appeal.	Departmental action on the case, if any.	General Remarks as to concurrence or otherwise with the Courts' decision.
Bunsee Sing, ...	Lance jemadar,	Criminal trespass.	3 Months.	Appealed.	Magistrate's decision reviewed, and appellant released.	Appeal to Judicial Commissioner by Assistant Commissioner.	The Assistant Commissioner disagreeing with the Magistrate, appealed to the Commissioner of the Division; who, on a technicality of law, threw the appeal out. Judicial Commissioner was referred to, when the men were released.
Tursoo Lall, ...	Peon,...						
Doorga Dyal, ...	Jemadar,	Bribery,	1 year, and a fine of Rs. 20.	Not appealed.	...	Deputy Inspector sent the case to the Deputy Commissioner of Pertaburgh, and after trial, offender was imprisoned.	In these cases, the Department took the initiative. The charge against the peon was not legally proven in Court, but his offence in the eyes of the Department stood. Both were dismissed the service.
Rughoonath Sing,	Peon,...	Ditto,	Acquitted; charge not legally proven.		...		

63. Seven officers of the grade of Deputy Inspector have, in the course of the year, done duty in Oudh. Two out of these have been simple substitutes, and at no one time has the number on duty exceeded five.

OFFICERS.

Deputy Inspectors.

Amount of work.

64. By regular marches, and independently of distance traversed out of Oudh on deputation by Mr. R. J. Whitten, these five officers have travelled over 9,104 miles, or 1,820 miles each on average, and between them have visited 1,162 saline factories of kinds. In their constant inspections of saliferous tracts, in their supervision of Departmental cases pending before Criminal Courts, in the additions which they have made to the general store of facts affecting consumption of salt, and in other ways needless to detail, each and all have rendered useful service, apart from the distance travelled over. One,—Mr. R. J. Whitten—chosen for a delicate and difficult inquiry in Bengal, acquitted himself with credit. In their ordinary course of duty, these officers are by no means left to themselves. They submit weekly tabulated diaries, which, passing at once under the eye of the Assistant Commissioner, come at the end of the month into this Office for examination and review. Each then sees, in the course of the following month, in the handwriting of the Head of this Office, what is thought of his work by the highest authority with whom he is concerned.

How supervised.

Individual work.

65. Gauged by out-door work, Mr. Kenyon has this year the lead, with an aggregate for 365 days of 2,256 miles, or 6·18 per diem; Mr. Whitten follows close, with 1,881 miles, for 334 days, so that his work may be bracketed as equal; Mr. Dawes has 1,797 miles, for 324 days, or 5·54 per diem—tolerable; and Mr. Lyon 1,791 for 365, or 4·90, which needs improvement. The work of other officers is for broken periods.

Work by Sub-Deputy Inspectors; and

66. To the 9,104 miles travelled over by the superior officers above named, if double the sum (which is well *within* the fact) be added for distance traversed by Sub-Deputy Inspectors, we have 27,312 miles of ground traversed by *supervising* officers of the Department. And at least 95,000 miles have been travelled by the lower grades.

" by lower grades.

Travelling of Assistant Commissioner.

67. The Assistant Commissioner accounts for 4,366 miles* personally traversed during the year; but, in his case, the figures would afford an entirely insufficient test of the value of his work.

SUBORDINATE REPORTS.

68. The subordinate reports need no reproduction. All our subject matter has been discussed out, leaving nothing new to write about. I cannot take up the time of superior authority with disquisitions and criticisms on systems approved, or with demands for increased force, which have no chance of being listened to, which would encounter, indeed, their first opposition in this very Office. Zealous for their duty, and jealous of the Departmental credit, our executive officers are slow to understand that Government does not aim at suddenly and violently trampling out every remnant of illicit manufacture of salt, but desires to extinguish it gradually and painlessly, keeping it at a low ebb meanwhile.

MENTION OF OFFICERS

69. I have again the pleasure of mentioning Mr. R. J. Whitten as pre-eminently deserving of commendation. He is a good officer all round—at desk, or in saddle. For hard, energetic, out-door work, Mr. A. M. Kenyon is quite his equal, although much inferior as a man of the pen; but he has done well in his own line. Mr. T. W. Lyon, who has suffered somewhat in health, is a promising officer.

70. The Assistant Commissioner has maintained his just reputation for zeal and devotion to Departmental interests. Much of the most important, in their future bearing, of his labours of the year having been performed under the immediate orders of the Chief Commissioner, it is unnecessary for this Office to comment on them.

F. W. VERE,
Deputy Commissioner of Inland Customs.

* *Viz.*, by rail, 2,910; by dâk, 999; marches, 457.

ANNEXURE A.

Months.	Collections for 1867-68.			Total 1867-68.	Total 1868-69.	Collections for 1868-69.			Increase.	Decrease.
	Fees.	Fines on Factories and Sales.	Duty on Salt.			Fees.	Fines on Factories and Sales.	Duty on Salt.		
	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.
April, ...	381 8 0	...	1,331 6 3	1,712 14 3	1,337 14 10	120 0 0	...	1,217 14 10	...	374 15 5
May, ...	146 8 0	3 0 0	1,154 12 8	1,304 4 8	1,290 14 11	8 0 0	...	1,282 14 11	...	13 5 9
June, ...	2 0 0	...	1,735 12 11	1,737 12 11	753 1 3	...	...	753 1 3	...	984 11 8
July, ...	254 0 0	64 14 11	715 7 3	1,034 6 2	986 6 4	506 0 0	...	480 6 4	...	47 15 10
August, ...	100 0 0	...	240 11 8	340 11 8	268 1 9	156 0 0	...	112 1 9	...	72 9 11
September, ...	2 0 0	...	223 1 7	225 1 7	564 0 3	6 0 0	...	558 0 3	338 14 8	...
October, ...	224 0 0	...	72 10 3	296 10 3	406 8 1	146 0 0	...	260 8 1	109 13 10	...
November, ...	536 0 0	...	217 5 5	753 5 5	951 8 9	340 0 0	...	611 8 9	198 3 4	...
December, ...	720 0 0	...	249 14 8	969 14 8	725 0 4	212 0 0	...	513 0 4	...	244 14 4
January, ...	858 0 0	...	550 12 0	1,408 12 0	1,212 7 5	334 0 0	...	878 7 5	...	196 4 7
February, ...	259 0 0	...	503 5 1	762 5 1	1,014 15 8	472 0 0	15 0 0	527 15 8	252 10 7	...
March, ...	338 8 0	...	1,097 10 5	1,436 2 5	1,720 10 3	140 0 0	...	1,580 10 3	284 7 10	...
Total ... Rs.	3,821 8 0	67 14 11	8,092 14 2	11,982 5 1	11,231 9 10	2,440 0 0	15 0 0	8,776 9 10	1,184 2 3	1,934 13 6
Deduct Increase, ...	...	...	...	...	...	...	...	...	...	1,184 2 3
Net Decrease, ...	...	...	...	...	...	...	...	...	...	750 11 3

F. W. VERE,
Deputy Commissioner of Inland Customs.

ANNEXURE B.

Annual Comparative Statement of Departmental Collections for 1868-69, *by Circles.*

Name of Circle.	Amount of Collections in 1867-68.	Amount of Collections in 1868-69.	Increase.	Decrease.
	Rs. As. P.	Rs. As. P.	Rs. As. P.	Rs. As. P.
Lucknow, ...	3,500 4 10	4,285 2 8	784 13 10	...
Hurdui, ...	1,937 3 3	951 8 9	...	985 10 6
Roy Bareilly, ...	2,438 6 10	2,439 5 11	0 15 1	...
Pertabgurh, ...	1,583 7 10	678 2 5	...	905 5 5
Gondah, ...	2,522 14 4	2,877 6 1	354 7 9	...
Total, ... Rs.	11,982 5 1	11,231 9 10	1,140 4 8	1,890 15 11
Deduct Increase, ...	...	...	...	1,140 4 8
Net Decrease, ...	...	...	... Rs.	750 11 3

F. W. VERE,
Deputy Commissioner of Inland Customs.

ANNEXURE C.

Comparative Statement of Crude and Refining Licenses issued in 1868-69.

Name of Circle.	Issued in 1867-68.		Issued in 1868-69.		Increase A. Licenses.	Increase B. Licenses.	Decrease A. Licenses.	Decrease B. Licenses.
	Licenses. A.	Licenses. B.	Licenses. A.	Licenses. B.				
Lucknow, ...	262	10	120	11	...	1	142	...
Hurdui, ...	342	6	155	4	...	...	187	2
Roy Bareilly, ...	74	6	27	4	...	...	47	2
Pertabgurh, ...	230	1	79	1	...	...	151	...
Gondah, ...	261	7	164	7	...	...	97	...
Total, ... Rs.	1,169	30	545	27	...	1	624	4
Deduct Increase, ...	...	...	...	...	...	...	...	1
Net Decrease, ...	...	...	...	...	...	...	624	3

F. W. VERE,
Deputy Commissioner of Inland Customs.

ANNEXURE D.

Licenses of both Letters Refused.

Name of Circle.	A.	B.	
Lucknow, ...	71	...	
Hurdui, ...	53	...	
Roy Bareilly, ...	...	...	
Pertabgurh, ...	29	...	
Gondah, ...	47	1	
Total, ...	200	1	

F. W. VERE,
Deputy Commissioner of Inland Customs.

ANNEXURE E.

Seized for Working without License.

	Cases.		Men.		Committed for Trial.			
					Cases.		Men.	
	1867-68.	1868-69.	1867-68.	1868-69.	1867-68.	1868-69.	1867-68.	1868-69.
	11	20	11	25	9	16	9	20

F. W. VERE,
Deputy Commissioner of Inland Customs.

APPENDIX III.

Review of the Administration of the Berar Section of the Inland Customs Line, for the official year 1868-69.

BERAR SECTION.

LINE.

THE position and numerical strength of the Line in officers and men, remains as described in the opening portion of last year's Administration Report. In view to the not distant abolition of the Loop Line in the Central Provinces, which would throw out of employ a considerable body of officers and men, this Office refrained from taking advantage of the sanction accorded by the Government of India in No. 2844 (Financial Department), dated 1st May, 1868, for an expenditure of Rs. 12,044-8-0 per mensem.

FINANCIAL RESULTS.

GROSS REALIZATIONS.

Compared with previous half-year.

Salt.

2. When our operations were last reviewed, we had the work of but six months to display; we now, for the first time, present returns for a complete official year, during which our gross realizations have amounted to Rs. 3,02,800 (£30,280), being 226·78 per cent. above the realizations of the first six months following the installation of the Department in the assigned districts. This income, derived solely from taxation of salt, is composed as shown in the following table:—

YEAR.	SALT.				SUGAR.		MISCELLANEOUS.	TOTAL.
	Quantity.		Rupees.		Quantity.	Rupees.	Rupees.	Rupees.
1868-69, ...	2,00,193	6 9	3,00,292	8 6	...	...	2,507 15 8	3,02,800 8 2
1867-68, Six months.	61,078	4 8	91,619	8 11	1,027 34 12	1,027 14 4	13 6 0	92,660 13 3

Increase.

3. The income of the twelve, compared with that of the six months, not merely, therefore, maintains its simple arithmetical proportion, according to which it might have been expected to have doubled, but actually exhibits an excess of more than twenty-six per cent.; evidence that throughout the community demand for the fully-taxed salt has begun to increase.

Cause explained.

4. It will be remarked that the figures for 1867-68 herein given, fall below those of the printed Administration Report for that year by the sum of Rs. 4,081-12-5. This represented the duty on salt originally imported into Berar, which afterwards crossed into the Central Provinces, to which the above was then of course transferred. By a local oversight, this Office was kept in ignorance of the transfer.

5. It has already been explained that the income of this Section is derived entirely from salt, the small sum realized at the commencement of operations upon sugar having been levied under a misconception (promptly corrected by this Office) of the bearing of the law.

6. Causes of increase, apart of course from the influence of the longer period, are two: exhaustion—perhaps not yet quite complete, but in progress towards completion—all the year through, of those stocks which escaped taxation when the Line was first laid down; and stoppage of manufacture of the inferior salt known as Bhooshkie. This Office is without means of judging whether any or how much of this latter salt, produced before withdrawal of the contract, remains unsold; but by the end of the current year, we may be regarded as free from its influence, which even now is not openly perceptible.

Importation of Kokan into Berar.

7. The duty-paying trade of this Section is confined exclusively to the Kokan, or Bombay coast salt. This may be said to enter the Assigned Districts by rail. As matter of fact, out of 2,08,665 maunds (7,728 tons) taken into Berar during the year, 2,07,595 maunds (7,689 tons) *have* gone in by rail. Of the remainder, 1,015 maunds (37 tons), passing by Sindkhera, from the neighbouring mart of Jaulnah, represent the direct traffic with the dominions of His Highness the Nizam; while 54 maunds (2 tons) have entered South-Western Berar from the border district of Chanda, in the Central Provinces. These figures show the actual traffic into Berar, no account being here taken of what was re-exported to the Central Provinces.

MISCELLANEOUS RECEIPTS.

8. Miscellaneous receipts amount to Rs. 2,507-15-8, composed of license-tax, fines, fees on partition rowannahs (taken out when the owner of a despatch wishes to sub-divide his venture), unclaimed deposits and rewards (proceeds of double duty and confiscation of dutiable goods); against Rs. 13-6-0 in 1867-68. The difference is mainly attributable to our having a full year of regular administration, during which all functions of the Department came into play, to review, against six months during which many operations remained in abeyance.

CHARGES.

9. The following table exhibits the charges of the two periods :—

Year.	Fixed.	Contingent.	Total.
	Rs. As. P.	Rs. As. P.	Rs. As. P.
1868-69, ...	1,19,417 11 4	8,880 2 7	1,28,297 13 11
1867-68, Six months, ...	39,472 9 8	7,760 10 2	47,233 3 10

Increase how caused.

10. The increase in fixed charges is traceable to the following causes :—

1st.—To twelve months being now in account against six.

2nd.—To the fact, that at first laying down the Line, great difficulty was experienced in obtaining men fit for enlistment. Gaps were thus left, and salaries of course undrawn; whereas during the year now under report, the force in subordinate grades was brought up to its full strength.

3rd.—To the Collector drawing arrears of his local allowance, from September, 1867, in course of the latter year.

11. While the increase on fixed charges is large, *viz.*, 202·53 per cent., that on contingencies is in comparison very small (14·42 per cent.). This is briefly explicable by referring to the fact that in laying down a new Line heavy expenses, such as travelling allowance to all grades of *employés* transferred, purchase of weighing apparatus and office-gear, have to be incurred. Much outlay thus came to be crowded into a limited period when our operations first commenced in Berar. Under no contingent heading is there any increase requiring further explanation than the natural operation of a longer against a shorter term.

NET REVENUE.

12. Deducting charges from gross realizations, the net income of the Berar Customs Line, during the year under report, amounts to Rs. 1,74,502-10-3. The contrast with the first six months of the Line's existence is shown in the following table :—

Year.	Gross Realizations.	Charges.	Net Revenue.	Percentage of Charges on gross Realizations.
	Rs. As. P.	Rs. As. P.	Rs. As. P.	
1868-69, ...	3,02,800 8 2	1,28,297 13 11	1,74,502 10 3	42·37
1867-68, Six months.	92,660 13 3	47,233 3 10	45,427 9 5	50·97

Decrease.

13. Although falling below that of last year by the not inconsiderable figure of 8·60 per cent., the proportion borne by charges to income is still high. Further on in this Report will be shown how it is proposed to lessen their incidence, subject to another diminution when this Section comes, as it now soon must, to be incorporated as an integral part of the great Imperial cordon, by which amalgamation a portion of the local charges will be shifted to the Imperial revenue.

COURSE OF TRADE.

14. The course of salt trade in the Berars is simple. It is derived from Oorun, Panwell, Matoonga, and latterly Bassein. The salt, carried on boat to the railway stations of Bassein, Boreebunder, and Kullian, and delivered by cart at Dadur, is thence conveyed by rail to Mulkapoor—the one great inlet—whence it passes on to the various railway stations up to Chandoor, and at these—principal among which as salt-marts are Sheogaon and Budnaira—where it gets into the hands of small traders and retail puchasers. Important internal marts are Khamgaon, Maikur, Bassein, Karinja, and Oomrawatee.

15. It is matter of extreme regret to be compelled to despatch this report without details of the selling rates, which during the year have ruled in the Assigned Districts; but, unfortunately, the information supplied to this Office in the subordinate reports of the year, has been so contradictory as to render it unworthy of reliance, so that we have been compelled to send this particular question back for reconsideration and renewed inquiry.

SMUGGLING.

16. But little smuggling has prevailed. In twenty-seven cases, 26 maunds 24 seers 10 chittacks of salt have been confiscated; while in 98 cases, 237 maunds 37 seers 7 chittacks have paid Rs. 714-10-2 as double duty. But 63 persons have undergone prosecution, out of whom 40 have been convicted and punished. The conclusions to which, in connection with this all but total absence of contraband trade, and with the peculiarities of the duty-paying traffic, this Office has been led, will be stated further on.

PENAL ACTION OF THE DEPARTMENT;

17. Details of the penal action of the Department are furnished in the following tables:—

Year.	Total number of Smugglers captured by the Department.	Released by the Department				Sent up for Trial.	Acquitted.	Convicted.	Pending.	Percentage of Convictions on number of Persons sent up for Trial, less those whose cases are still pending.
		On payment of single duty.	On payment of double duty.	For want of proof.	Total.					
1868-69, ...	292	6	195	28	229	63	21	40	2	63·49
1867-68, ...	13	9	...	...	9	4	...	...	4	...

PERSONS.

18. It is a great point with this Office to avoid recourse to the Criminal Courts wherever it is possible to do so, and it is now satisfactory to be able to report that out of the 292 persons who, in course of the year, subjected themselves to interference from the executives of the Department, as many as 229, *viz.*, 78·42 per cent., were susceptible of release without other than Departmental penalties.

Results of committals.

19. In the results of committals there is some cause for dissatisfaction, the percentage of convictions (65·57 per cent.) being much below the average. Taking the convictions for the whole Line, we have attained as high a percentage as 94, so that in this particular there is still a great advance to be made in Berar. Our officers attribute much of their ill-success to a tendency in the local Courts to deal

leniently with smuggling cases, on the score of general ignorance of Customs' laws; but while there is apparently some foundation for this belief, there is evidently much room for improvement in Departmental preparation of cases; and in view to securing this, the matter has been brought prominently to the notice of the local officers.

Synopsis of convictions.

20. The percentage of those who, on conviction, preferred payment of fine to enduring imprisonment, is high (87·50 per cent.). The average of *paid* fines, as compared with those realized in other parts of the Line (Rs. 12-9-1), is also high.

Year.	Imprisoned in Default of Payment of Fines.							Paid Fines.																
	Number imprisoned for 6 months.	Ditto above 3 months.	Ditto do. 2 months.	Ditto do. 1 month.	Above 15 days.	Ditto 10 days.	Below 8 days.	Total number who underwent Imprisonment.	Number who paid fines of Rs. 250 and upwards.	Aggregate paid.	Above Rs. 100 and below Rs. 250.	Aggregate paid.	Above Rs. 50 and below Rs. 100.	Aggregate paid.	Above Rs. 30 and below Rs. 50.	Aggregate paid.	Above Rs. 20 and below Rs. 30.	Aggregate paid.	Above Rs. 10 and below Rs. 20.	Aggregate paid.	Above Rs. 5 and below Rs. 10.	Aggregate paid.	Below Rs. 5.	Aggregate paid.	Total who paid Fines.	Aggregate paid.
1868-69, ...	...	...	...	...	...	5	...	5	...	...	...	...	...	...	3	140	1	25	7	125	7	86	17	64	35	440
1867-68, ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

CONSUMPTION OF SALT.

MEN;

21. In common with their brother officers, the Department through, those of the Berar Line have devoted attention to obtaining statistics of the consumption of salt by human beings and by cattle. Results of these enquiries have been embodied by the Commissioner in Appendix A. The Collector considers that five and a-half seers per head, which is about a seer above the average, will fairly represent consumption by the population of Berar. If this be true, then, numbering roundly two and a-quarter millions, it would require for its internal consumption 3,09,375 maunds of salt per annum; and as we have imported but 2,00,193 maunds in the year under review, we have still much to recover. In favour of Mr. Martin's theory, there is the admittedly prosperous condition of the people, tending perhaps to a little waste of a substance, not very dear and in very general demand; and in favour of our having yet some leeway to fetch up, there is our fair assurance that at the very least a lakh of maunds existed untaxed in Berar, when the Line was laid down, and that not until the year under review was well advanced, was the local manufacture of Bhooshkie salt brought to an end. In the course of the present year we shall know more of the probable annual demand for salt in Berar.

CATTLE.

22. To cattle, salt appears to be given in such limited quantities and at intervals so long, as to make it apparent that a well-to-do people is not likely, out of any dread of the expense, to stint its cattle of the small supply which is all that apparently they look upon as requisite.

HEDGE.

23. No hedge has so far been reared. The probability which up to a certain period was in evidence, that equalizations of duty would render unnecessary some of our existing arrangements, has hitherto withheld this Office from pressing for the allotment of land, without which it would not be advisable to attempt planting.

OFFICERS' QUARTERS.

24. The same uncertainty of permanence has prevented us from coming up with any estimate for public works, in the way of officers' houses, &c.; nor are we

as yet even, sufficiently assured against local alterations to feel warranted in proposing expenditure of the kind.

ESTABLISHMENT.
CASUALTIES.

25. Remembering what was the reputation for unhealthiness of some portions of the country through which we were obliged to carry our Line, our casualty-roll presents subject for congratulation. The death-rate is low, 1·43 per cent. We have lost none of the superior grades, nor has any officer suffered in health so as to make his removal from Berar a matter of necessity.

OFFICERS.

26. The officers now composing the staff of the Berar Line have on the whole performed their active duties in a satisfactory manner. More or less, all are put to inconvenience by want of proper house accommodation, and their beats are without exception long. They have, thus, all worked under conditions of some personal discomfort and difficulty, despite which they have discharged their duties efficiently, and as a body have earned the favourable notice of the Resident. I select as deserving special commendation, Patrol Ahmud-oollah Khan, of Kaeer, who has not only performed a very fair amount of out-door work, but has written a creditable report on the local operations of the year.

F. W. VERE,

Deputy Commissioner of Inland Customs.

LIBRARY OF THE BOMBAY BRANCH OF THE ROYAL ASIATIC SOCIETY

REPORT

ON

THE ADMINISTRATION

OF THE

Inland Customs Department

FOR THE

OFFICIAL YEAR

1869-70.

APPENDICES A TO K.

CALCUTTA:
OFFICE OF SUPERINTENDENT OF GOVERNMENT PRINTING.
1871.

Appendix A.

The Kohat Mines.

KOHAT MINES.

Situation.

The Kohat mines are situated in a belt of low ranges of hills that run along the southern portion of the Kohat District, stretching from near Bunnoo or Duleepgurh eastwards to the Indus.

Number of mines.

2. At present only five mines are here worked; these, enumerating them according to geographical position and commencing from the east, are Jutla, Malgeen, Nurree, Kurruck, and Bahadur-Kheyl. Nine other mines, Nundrukka, Munzullie, Burburra, Speena, Kurrur, Gooroozai, Soortung, Dhund, and Shah, have been worked at one time or another, but are now closed.

Management of mines and sale of produce.

3. As far as I can understand, purchasers make their own arrangements with the miners for excavating the salt, and then pay to Government a duty of 4 annas a maund (13*s.* 7*d.* per ton) at Jutla, Malgeen, and Nurree, 3 annas a maund (10*s.* 2¼*d.* per ton) at Kurruck, and 2 annas (or 6*s.* 9½*d.* per ton) at Bahadur-Kheyl on all they remove. I have not visited these mines, but from all that I can learn, the excavations are carried on without any system and in a most wasteful manner. They have no educated European supervisor, and are supposed to be looked after by the Deputy Commissioner of Kohat, who doubtless does all that is possible, but who with fifty other more important matters to attend to, and one of the most troublesome districts in the country to manage, cannot, of course, see that justice is done them.

Out-turn.

4. During the year under review (1869-70) the five mines turned out 496,216 maunds (18,229 tons), being (*vide* Statement 1) a quantity nearly one-fourth in excess of the yield of the previous year, and still more in excess of that of any other antecedent year. Malgeen and Jutla are the two most important mines, and to these the Afreedies principally trade, while Bahadur-Kheyl, the next most important, is chiefly frequented by the Wazeerees.

Gross realizations.

5. The gross realizations for 1869-70 (*vide* Statement 1) were Rs. 1,07,023, a sum as much in advance of the realizations of previous years as the out-turn of the former was in excess of that of any of the latter.

Charges.

6. The charges amounted to Rs. 87,876. These may be divided into three heads; first, allowances (it is presumed in compensation for proprietary rights, or as a sort of blackmail) to certain *Mullicks*, or petty chiefs or land-owners, and contingencies, Rs. 11,436 (*vide* Statement 1); second, fixed establishment at the mines, open and closed, Rs. 17,556 (*vide* Statement 2); and third, the cost of the Indus Valley Line (maintained solely to prevent this cheap salt reflexing into our Cis-Indus provinces and displacing there our full dutied salt), Rs. 58,884, exclusive of share of cost of supervision by Collector of Shahpore, &c.

Net revenue.

7. The net revenue for the past year, the first in which the mines have ever even paid their own expenses, amounts to Rs. 20,147, or in round numbers about Rs. 4 per 100 maunds, against Rs. 3 per *maund* for the salt sold at the Cis-Indus mines!

THE KOHAT MINES.

Up to the year under review these mines have yearly been a source of loss to us.

8. Up to the beginning of the year under review these mines have been a source of yearly loss to us. During the last 20 years we have not only presented some 200,000 tons of beautiful salt to hordes of ruffians, free, gratis, for nothing (so far as the imperial exchequer is concerned), but we have further expended some £8,000 out of our own pockets in this kindly endeavour to promote their comfort.

The continuance of these mines justified on political grounds,

9. The continuance of such a system, whereby we have not only sacrificed revenue that might have been there realized, but actually expended revenue realized elsewhere, merely to enable us to supply cheap salt to Wazeerees, Afreedies, and the like, who would instantly rob and murder any inoffensive British merchant or traveller who ventured to set foot within their territories, has been justified on political grounds. It has been urged first, that the possession of these mines is a source of great political strength, and second, that to raise the price at the mines would entail a little frontier war.

which, however, are only doubtfully sound.

10. These are two axioms of the old Punjab frontier policy, but they are by no means now universally admitted by even frontier officers. There are some who consider that our timidity in dealing with this and similar questions has led these mountain savages (who at one time certainly feared us) to despise us more or less, and whether this be the case or not, every frontier officer will admit that during the last 20 years their respect for our authority has year by year decreased.

These grounds examined. The mines a source of political strength.

11. Let us, however, examine these grounds! The possession of these mines a source of political strength—with all due deference to the gallant officers who enunciated this dogma, I must venture to question its truth; what kind of political strength can it be called which does not enable us to sell our own goods, I will not say at what prices we like, but even at *cost* price?—so far from being a source of political *strength*, it seems to me that our working these mines is an unmistakable evidence of political *weakness*.

12. But it may be argued that the political strength involved in our possession of these mines consists in our power to close them should the tribes misbehave themselves. But if merely raising the duty will provoke a little frontier war, *à fortiori*, closing the mines entirely would provoke a great one; even, therefore, under this interpretation, the so-called political strength with which the possession of these mines endows us, is merely a power to provoke when we choose a great frontier war, to avoid which very contingency on a small scale, the very same politicians tell us we must continue to sell our salt and work our mines at a loss. As a matter of fact, I submit that so far from having been any source of strength, these mines, owing to misconception in the mode of dealing with them, have been the cause of loss of prestige, and hence a source of political weakness. The tribes have learnt to believe that we *dare* not demand from them a fair price for our own salt. Once in an injudicious manner the duty was suddenly raised to Rs. 2 per maund. There was no frontier war, but trade ceased and the frontier became excited; no one doubts that this sudden and enormous increase was unwise; it is impossible in fact to conceive anything more opposed to good policy and common sense, but it is doubtful whether the course pursued to retrieve this blunder was not almost more unwise; either the enhancement, however injudicious, should have been adhered to, and this, considering the people and the place, would perhaps have been in the long run the least

This ground untenable; on the contrary, they have, owing to our mismanagement, been a source of weakness.

damaging course, or it should have been declared a mistake and struck off then and there. But instead of this, intermediate reductions were tried, and when the tribes still held out, we ultimately, after several months, come down to our original prices. Most assuredly these mines have hitherto been no source of political strength to us, in the true sense of the phrase; it is patent that they might have been so, that they may now become this, but that they *have* never been so, it seems to me, is equally clear.

To enhance the duty would provoke a frontier war.

13. Next it is asserted that to enhance the duty (*i. e.*, the price at which we sell our own goods) would provoke a frontier war. In the first place, I traverse this assertion, and believe with some at least of the frontier officers of the division that a small gradual increase would provoke no war, although it might possibly for a time excite some discontent and check the trade. But even granting that this assertion *was* well founded, it would not form, under all the circumstances of the case, a wholly conclusive argument against the measure. If the arrogance of these mountain robbers has risen to such a pitch; if their contempt for our power has so developed that they are ready to fight us merely because we wish so to price the articles they desire to buy from us that we may be no losers, it seems to me that the sooner we allow them to do so the better and wiser it will be. If in the time of our strength, menaced by no traitors at home and no enemies abroad, they are ready to break the peace and make raids into our territories solely because we alter slightly the prices at which we offer for sale our own property, how much more ready will they be to do all this in any hour of temporary weakness, when the stake for which they strike is not the saving of a few rupees, but the plunder of rich districts! Surely it would be better to settle with them now when we have no one else on our hands, than to have this to do when other and more dangerous foes are at our doors. If their temper is now so unbridled that they venture for such a cause to break with us, it is time we taught them that arrangements within our own territories are not dependent on their good will and pleasure, and that while we interfere in no way within their limits, we have no idea of allowing them to dictate to us within ours.

This is more than doubtful;

and, if true under the circumstances of the case, would be no sufficient argument against the measure.

14. But it appears to me, and in this I believe that both the Deputy Commissioner of the District, Lieutenant Cavagnari, and the Commissioner of the Division, Colonel Pollock, agree with me, that a slightly gradual increase in our rates would at worst cause nothing more than the temporary closing of a single pass and a decrease in the trade. Very probably, if pains were taken to explain the matter, the increase would be acquiesced in with nothing beyond a slight murmur. These people buy other things besides salt in our territories; the prices of these rise and fall. How is it that this leads to no serious complications? Are we really so despicable in their eyes that while they submit to the Bunniahs increasing their prices, they will not permit us to do the same?

15. I should propose to raise the rates which now stand at 4, 3, and 2 annas a maund to 6, 4½, and 3 annas. Two or three years hence they might be again raised, and ultimately these might become a source of very considerable revenue, and, having in the meantime served as a lesson to our wild and lawless customers, that we are not to be dictated to where our own affairs are concerned, really and truly a source of political strength.

ALLAN HUME,
Commissioner, Inland Customs.

APPENDIX A, STATEMENT 1.

Statement of Salt sold and amount realized between the years 1866-67 *and* 1869-70 *in each Mine in the Kohat District.*

No.	Names of Mines.	Rate per Kohatee maund (105 Rupees in weight).	1866-67.			1867-68.			1868-69.			1869-70.			REMARKS.
			Number of maunds sold.	Amount realized.	Percentage paid quarterly to Mullicks, and contingencies.	Number of maunds sold.	Amount realized.	Percentage paid quarterly to Mullicks, and contingencies.	Number of maunds sold.	Amount realized.	Percentage paid quarterly to Mullicks, and contingencies.	Number of maunds sold.	Amount realized.	Percentage paid quarterly to Mullicks, and contingencies.	
		Rs. A. P.	M. S. C.	Rs. A. P.	Rs. A. P.	M. S. C.	Rs. A. P.	Rs. A. P.	M. S. C.	Rs. A. P.	Rs. A. P.	M. S. C.	Rs. A. P.	Rs. A. P.	
1	Jutta	0 4 0	109,016 20 0	27,254 2 0	1,407 10 6	110,189 5 0	27,547 4 6	1,427 3 2	112,767 20 0	28,191 14 0	1,454 9 2	142,297 5 0	35,574 4 6	1,823 11 2	
2	Malgeen	0 4 0	117,923 35 0	29,480 15 6	2,450 10 4	110,235 35 0	27,558 15 6	2,437 14 0	83,416 0 0	20,854 0 0	2,102 11 2	150,766 0 0	37,691 8 0	2,944 9 1	
3	Nurree	0 4 0	44,220 15 0	11,055 1 6	1,004 9 3	38,130 35 0	9,532 11 6	937 4 1	35,793 0 0	8,948 4 0	876 5 5	45,044 5 0	11,261 0 6	1,048 4 0	
4	Kurruck	0 3 0	21,017 20 0	3,940 12 6	244 11 1	31,711 20 0	5,945 14 6	394 9 7	50,224 0 0	9,417 0 0	578 4 3	43,725 10 0	8,198 7 9	515 6 3	
5	Bahadur-Kheyl ...	0 2 0	92,591 0 0	11,573 14 0	4,150 11 1	104,003 30 0	12,550 7 6	4,492 7 9	120,576 0 0	15,072 0 0	5,375 2 10	114,384 0 0	14,298 0 0	5,104 4 4	
	Total ...	.....	384,769 10 0	83,304 13 6	9,258 4 3	394,271 5 0	83,135 5 6	9,689 6 7	402,776 20 0	82,483 2 0	10,387 0 10	496,216 20 0	1,07,023 4 9	11,436 2 10	

THE KOHAT MINES.

APPENDIX A, STATEMENT 2.

List of Salt Establishment, showing number of each grade and salaries of the same.

No.	Designation.	Salary.	Total.	No.	Designation.	Salary.	Total.
		Rs. A. P.	Rs. A. P.			Rs. A. P.	Rs. A. P.
	Jutta Mine.						
1	Superintendent ...	100 0 0			Brought forward ...	.....	979 12 0
1	Darogah	50 0 0					
1	Mohurir	15 0 0			**Munzullie.**		
1	Weighman	6 0 0					
1	Jemadar	15 0 0		1	Havildar	9 0 0	
4	Sepoys, at Rs. 6 each ...	24 0 0		20	Sepoys, at Rs. 5 each ...	100 0 0	
14	„ „ 5 „ ...	70 0 0			Bheestie	2 10 0	
	Bheestie	2 6 0					111 10 0
	Stationery	1 8 0					
			283 14 0		**Burburra.**		
	Malgeen.			1	Havildar	9 0 0	
1	Darogah	30 0 0		6	Sepoys, at Rs. 5 each ...	30 0 0	
1	Mohurir	15 0 0			Bheestie	0 14 0	
1	Weighman	6 0 0					39 14 0
1	Jemadar	15 0 0					
11	Sepoys, at Rs. 6 each ...	66 0 0			**Speena.**		
9	„ „ 5 „ ...	45 0 0					
	Bheestie	2 10 0		1	Havildar	9 0 0	
	Stationery	1 0 0		4	Sepoys, at Rs. 6 each ...	24 0 0	
			180 10 0	5	„ „ 5 „ ...	25 0 0	
					Bheestie	1 4 0	
	Nurree.						59 4 0
1	Darogah	25 0 0			**Kurrur.**		
1	Mohurir	30 0 0					
1	Weighman	6 0 0		1	Havildar	9 0 0	
10	Sepoys, at Rs. 5 each ...	50 0 0		3	Sepoys, at Rs. 6 each ...	18 0 0	
	Bheestie	1 6 0		7	„ „ 5 „ ...	35 0 0	
	Stationery	1 0 0			Bheestie	1 6 0	
			113 6 0				63 6 0
	Kurruck.				**Gooroozai.**		
1	Darogah	25 0 0		1	Havildar	9 0 0	
1	Mohurir	15 0 0		15	Sepoys, at Rs. 5 each ...	75 0 0	
1	Weighman	6 0 0			Bheestie	2 0 0	
1	Jemadar	15 0 0					86 0 0
2	Sepoys, at Rs. 6 each ...	12 0 0					
23	„ „ 5 „ ...	115 0 0			**Soortung.**		
	Bheestie	3 4 0					
	Stationery	1 0 0		5	Sepoys, at Rs. 5 each	25 0 0	
			192 4 0		Bheestie	0 10 0	
							25 10 0
	Bahadur-Kheyl.				**Dhund.**		
1	Darogah	25 0 0					
1	Mohurir	15 0 0		4	Sepoys, at Rs. 5 each ...	20 0 0	
1	Weighman	6 0 0			Bheestie	0 8 0	
1	Jemadar	15 0 0					20 8 0
20	Sepoys, at Rs. 5 each ...	100 0 0					
	Bheestie	2 10 0			**Shah.**		
	Stationery	1 0 0					
			164 10 0	1	Havildar	9 0 0	
				2	Sepoys, at Rs. 6 each ...	12 0 0	
	Nundrukka.			5	„ „ 5 „ ...	25 0 0	
					Bheestie	1 0 0	
1	Havildar	9 0 0		1	Mohurrir	30 0 0	
7	Sepoys, at Rs. 5 each ...	35 0 0					77 0 0
	Bheestie	1 0 0					
			45 0 0				
	Carried over ...	.....	979 12 0		Grand Total ...	.....	1,463 0 0

Appendix B.

The Sambhur Lake.

Importance of the question leads to the reproduction *in extenso* of the Assistant Commissioner's Annual Report of the management of the Sambhur Lake.

The assumption of the management of the Sambhur Lake by the Inland Customs Department was so important a matter, and the Assistant Commissioner's Annual Report in regard to that management is really so full of useful information, that I have no hesitation in reproducing it *in extenso*.

This report deals only with two months, and further particulars up to the close of this first working season are therefore subjoined.

2. This report, however, as regards financial results, deals only with two months; our assumption of management only dating from the 1st February 1870, and it will therefore be useful to state briefly the results obtained up to the close of this first working season in July, and the prospects which these hold out to us of our management proving successful in a financial as well as in every other point of view.

Notwithstanding the great difficulty in obtaining labour, we had stored, previous to the setting-in of the rains, over 7½ lakhs of maunds at a cost of 6·14 pies per maund.

3. Notwithstanding the extraordinary difficulties we had to contend against in the matter of procuring labour (difficulties fully explained in the Assistant Commissioner's report), we succeeded, owing to the cordial assistance of the Jeypoor Durbar, and Major Bradford, the Political Agent of that State, as well as by great exertions on our own part, in securing a fair, although not abundant, supply of labour, and, previous to the setting-in of the rains, had succeeded in extracting and storing 756,656 maunds net* at a cost of Rs. 3-3-2. 12 per 100 maunds, or 6·14 pies per maund.

This result under the circumstances may be accepted as very satisfactory.

4. I consider this result satisfactory; when the working season set in, we discovered that we were in error as to this being practically a peculiarly favorable one for our purposes. True, the lake shrunk to a mere puddle, and thousands on thousands of tons of the finest salt formed near its centre, but this was several miles away from the nearest point at which storage was possible, and even had carriage been available, the expense of cartage for this long distance would have vastly increased the cost of our salt. Even in the case of our dams, or *paees*, owing to the native officials of the joint jurisdiction not having (in anticipation of our assumption) taken them in hand soon after the rains in 1869, these, when at last we succeeded in January 1870 in getting them taken in hand, were further out into the bed of the lake than they should have been, and consequently porterage absorbed a much larger share of our by no means abundant supply of labour than it should have done. All things considered, 7½ lakhs of maunds, stored at a minute fraction over half an anna per maund, may be accepted as a very good season's work for this particular first season, and Mr. R. M. Adam, the Assistant Commissioner, deserves great credit for the results he has obtained.

Probable future financial results.

5. The experience now gained shows us that we may calculate on manufacturing 8¼ lakhs of maunds for a sum not

* I use the word *net* advisedly. We really measured into stock 25 per cent. more than this. We strike this percentage off at present from our gross storage to allow for dryage, loss, and waste. Very probably experience will prove that we have assumed too high a figure for this, but at first it is best to be on the safe side.

exceeding Rs. 30,000; establishment for the year will not exceed Rs. 45,000; contingencies Rs. 5,000; payments to both States Rs. 4,00,000. Thus our total expenditure will not exceed Rs. 4,80,000. Per contra, if we sell $8\frac{1}{4}$ lakhs of maunds in the year (our limit up to which we pay no royalty), 172,000 maunds at 9 annas to Jeypoor, and the rest at 10 annas to the public, we shall realize Rs. 5,04,875, leaving a balance of Rs. 24,875 in our favor. Should we exceed this limit, every lakh of maunds above it will cost us in extra supervision and manufacture Rs. 8,000 as a maximum, and we shall pay on it a royalty Rs. 25,000, while we shall realize by its sale Rs. 62,500, thus obtaining a clear profit of Rs. 29,500.

so far favorable, but hinge on the amount of salt sold by us,

6. So far all is favorable, but necessarily even the profit of Rs. 24,875 hinges on our *selling* $8\frac{1}{4}$ lakhs of maunds. If we only sell 785,200 maunds we should only just clear ourselves, whereas if we sold less we should be losers.

which there is every reason to believe will not fall short of the limit necessary to yield us a profit.

7. There appears, however, to be every prospect of our selling at least $8\frac{1}{4}$ lakhs of maunds. Notwithstanding the existence of large stocks of stolen salt outside our jurisdiction; notwithstanding the abnormally large sales that immediately preceded our taking charge; and notwithstanding the novelty of our arrangements, we have sold during the first five months of our management, from 1st February to 30th of June, 435,289 maunds, and have consequently only 389,711 maunds to sell during the remaining seven months to make up the $8\frac{1}{4}$ lakhs. In November, December, and January we ought certainly, unless something unforeseen occurs, to sell at least a lakh of maunds per mensem, and it will be strange if the sales of the other four months do not aggregate Rs. 90,000.

The Native States gainers by the arrangements, &c.

8. That by our instrumentality the Native States will realize a larger revenue from the lake than they have ever done, and that they have made excellent bargains in the arrangements they have entered into with us, is certain, and is not, I believe, denied by either of them. That Sambhur salt will be hereafter put into the market throughout Northern India far cheaper than would have otherwise been possible is also beyond doubt. Our officers have pulled well both with the officials and people of the Native States, the people of the immediate neighbourhood acknowledging their presence as a blessing, and if over and above all this, Government realizes some small profit, as compensation for the great extra trouble entailed upon some of its officers, I think the whole arrangement may be regarded as a very satisfactory one, notwithstanding the strong feeling that undoubtedly existed throughout Rajpootana against our assumption of the lake, and the erroneous notion there so widely diffused that to serve our own purposes we had coerced the native sovereigns into leasing the lake to us. The benefits to all parties arising from the arrangement will be permanent, while the injurious conceptions as to our motives and conduct will as time goes on give place to juster views.

ALLAN HUME,

Commissioner, Inland Customs.

[For facility of reference, copies of the Treaties and the more important orders of Government in regard to the assumption of the management of the lake are appended.]

THE SAMBHUR LAKE.

Assistant Commissioner's Report on the Sambhur Lake for 1869-70.

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THE SAMBHUR LAKE.

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THE SAMBHUR LAKE.

From the Assistant Commissioner, Inland Customs, Sambhur, to the Commissioner, Inland Customs, Agra,—(No. 94, dated Sambhur, 27th April 1870).

INTRODUCTION.

Although much has been written about this famous salt source, a few remarks regarding it may fitly premise this report.

THE SAMBHUR LAKE. Its position and

2. The Sambhur Lake is situated in lat. 26°-58′ and long. 75°-5′ on the east of the Aravulli range of hills, which run in a north-westerly direction through Rajpootana. The surrounding country is arid and sterile, and to the north-west is a sandy waste called the Great Desert, with Scinde on its western and the Punjab on its northern and western boundary.

description.

3. After a heavy rainfall, when the lake contains water up to its high-water level, it occupies a space nearly twenty miles in length, with a breadth varying from a mile and a half to seven and a half miles. The deepest part is towards the east of the promontory called Mata Pahar, which is situated on the southern bank of the lake. The depth there is about four feet. Towards the eastern extremity of the lake the depth ranges about one foot.

Its present condition.

4. At present the scanty rainfalls of the past years have left the lake unusually low. In December 1869 the lake contained a shallow layer of highly concentrated brine, which now having formed into salt gives the whole lake-bed the appearance of being frozen. The upper surface of the salt is tinged with a beautiful roseate hue, due possibly to the existence of some microscopic algæ.

Its tradition.

5. The popular legend which accounts for the formation of the lake is to the following effect:—

About the year 608 Sumbut, or about 551 A. D., the goddess Sumbra or Sakumbree Davee, the tutelary goddess of the Chouhan Rajpoots, in return for the milk supplied by one of their cows to a religious ascetic, converted a dense forest into a plain of gold and silver.

The then inhabitants of Sambhur looking upon this as a curse rather than a blessing, as it would be sure to lead to endless feuds, requested the goddess to retract her gift. But the goddess being too magnanimous to retract her favor, converted it into a crude form, and transformed the lake from silver to salt.

A chemical result tended to verify this tradition in the native mind.

6. Since our arrival here, a circumstance occurred which, from its remarkable coincidence with this tradition, has done much to verify it in the minds of the ignorant. Our chemical analyst, wishing to obtain some pure silver, converted some metallic silver into chloride of silver.

This was mixed with a little borax to act as a flux, and the white mass placed in a crucible and made over to a village goldsmith to reduce it to its metallic form. When the furnace had reached a sufficient heat, the workers were astounded at seeing molten silver in the crucible, and from the nature of the legend, they at once assumed that we had discovered a means of realizing the original gifts of the goddess. It may be well to note that in presence of some excitement to which this incident gave rise, the *rationale* of the process was very carefully explained to leading men of the place (Jodhpoor local authorities) by Messrs. Hume and Vere, who, several miles apart from each other at the time, received deputations anxious to have the phenomenon made clear to them.

Its annual supply of salt dependent on rainfall, &c.

7. The annual supply of salt varies according to the rainfall, the means expended on the construction and repairs of

the salt pans, and the amount of labor procurable. The former officials state that the largest out-turn occurred about 1839, when 20,00,000 maunds were extracted, but the average out-turn is about 9,00,000 maunds.

Source of supply. Theories regarding this.

8. Various theories have been given to account for the saline character of the lake. One is, that the foundation of the bed is rock salt; another is, that it contains brine springs similar to those which exist in the Bhurtpore State; a third, and, in my opinion, the most probable, is, that, as the rocks of the surrounding country belong to the Permian* system,—a system which abounds in limestone and salt,—the yearly supply is washed into the lake from the extensive water-shed which flows into it.

Former ownership.

9. Sambhur has been the scene of many fiercely contested battles between the neighbouring Rajpoot Chiefs and their Mahomedan conquerors. The lake was worked by the Governments of Akbar and his successors up to the reign of Ahmed Shah, when it again became the property of the Jeypoor and Jodhpoor Governments. For ten years (from 1835 to 1844) it was worked by the Indian Government to repay them for compensation due, and expenses incurred in repelling the predatory raids of the Rajpoot tribes in British territory.

Now leased by treaty to British Government.

10. From 1844 it was worked by the joint Governments of Jeypoor and Jodhpoor; but, under separate treaties between the Governments of Jeypoor and Jodhpoor and the British Government, on the 1st February 1870 the British Inland Customs assumed charge of the lake with the existing stock of salt.

FINANCIAL RESULTS.

GROSS REALIZATIONS.

11. The gross revenue realized during February and March of the official year 1869-70 was Rs. 1,48,283-13-6, the details of which are as follows:—

	Rs.	A.	P.
Stock sold	1,48,096	14	0
Amount realized on salt uncovered by passes in the town of Sambhur	86	4	0
Miscellaneous (fines on traffic guards and laborers, and fees on duplicate warrants) ...	2	1	6
Income Tax	98	10	0
Total ...	1,48,283	13	6

CHARGES.

12. The charges as per accounts against the realizations amount to Rs. 8,121-3-10.

Analyzed. Salaries and contingent charges.

13. This sum includes all the expenditure previous to our assuming charge, and also all the contingent expenditure for travelling allowances, and plant, such as scales and weights, office furniture, treasure chests, and carriage of the same. The details are as follows:—

	Rs.	A.	P.
Pay of temporary establishment, from November to 31st January	2,680	7	9
Pay of fixed establishment for February ...	2,920	2	1
Contingent, from November to 31st March ...	1,567	3	7
Manufacture, during February and March ...	953	6	5
Total ...	8,121	3	10

* Derived from *Perm*, a Russian Government where these strata are extensively developed.

THE SAMBHUR LAKE.

14. The expenditure under the head of Manufacture is divided into five sub-heads, as follows :— Outlay on production of salt.

Details of outlay.

Preliminary.	Construction.	Extraction.	Extraction and Porterage.	Miscellaneous.	TOTAL.
Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
356 14 1	79 7 9	11 3 0	491 13 0	14 0 7	953 6 5

15. The amount of salt stored and extracted amounts to 30,640 maunds, *viz.*— Quantity produced.

	Maunds.
Quantity stored	29,943
,, extracted	697
	30,640

16. This gives a rate per 100 maunds of Rs. 3-1-9·4, but this affords no general idea of the average rate which will be obtained at the expiry of the season for salt collection. Rate per 100 maunds.

17. The cost of storage is regulated by the distance of the work from the town, the distance and freeness from mud or otherwise of the salt crop from the dry edge of the lake, and the distance from the dry edge to the store. Storage.

18. The average rate per maund at present paid for storage (including extraction) is 4·8 pies per maund, or Rs. 2-8 per 100 maunds. Combined average rate.

19. For extraction the average rate is 2·85 pies per maund, or Re. 1-7-9 per 100 maunds. Extraction. Average rate.

20. For porterage the average rate is 1·94 pies per maund, or Re. 1-0-2 per 100 maunds; the average distance over which salt has to be carried is 564·5 yards, and this gives an average rate per mile per maund for porterage of 6·05 pies. Porterage. Average rate. Rate per maund per mile.

21. Comparing the realizations, plus the new stock, with the charges incurred as per accounts, we find as follows :— PERCENTAGE OF CHARGES ON REALIZATIONS. As per accounts.

	Rs.	A.	P.				
Gross revenue	1,48,283	13	6				
New stock of 30,640 maunds at 10 annas per maund	19,150	0	0				
	1,67,433	13	6	Total charges ...	Rs.	8,022	9 10

or a charge of Rs. 4·25 per cent. of charges against collections.

22. The actual charges which have been, and which have to be paid increase this rate very considerably— Actual.

		Rs.	A.	P.
Realizations as above Rs. 1,67,433-13-6 ...	Charges as above	8,121	3	10
	Fixed establishment, March	3,313	3	5
	Part payment of lease for two months, at 4 lakhs per annum	66,666	10	8
	Cost of manufacture of 2,333⅓ maunds share for two months at 14,000 maunds per annum	*		
		78,101	1	11

and the above figures will show that the actual cost on collections is Rs. 46·64 per cent.

23. During years of average rainfall the production of salt is effected close to the town of Sambhur, but in exceptional MANUFACTURE. LOCALITY VARIES ACCORDING TO EXTENT OF RAINFALL.

* According to para. 45, Section IV of the Inland Customs Code for the Sambhur Division, this claim lapses owing to its not having been applied for before the close of the official year.

years like the past, when the lake is so unusually low, the preliminary operations have to be conducted to the west of the town.

Modes described.

24. Up to the present time, only two methods of storing the lake-brine for salt crops have ever been resorted to at Sambhur,* that most adopted is called the "*puee*" or "*sangar*" mode, which consists in throwing up low retaining walls to prevent the water from receding to lower levels, and the other is the Kyar mode, which consists in forming enclosures protected by strong embankments in the bed of the lake.

"Puees" or low retaining walls.

25. By far the greater portion of the salt is stored by means of the retaining walls, and the bed of the lake bears evidence to this, in that the eastern or higher portion of it is all traversed by this net-work of walls which in many places extend far out into the bed of the lake, and in other places are seen well above the high-water level.

Their object.

26. The object gained by the construction of these walls is, that during the hot months they expose a certain portion of the brine to rapid solar evaporation, and prevent it in its concentrated state from flowing down to the lower levels of the lake, which it would otherwise do. To expedite rapid evaporation, lower walls of mud only are made at right angles to the main wall, thus separating the enclosed sheet of water into a multitude of salt pans. When a crop of salt has been stored, sluices are opened in the main retaining wall to allow the strong monsoon winds from the west to drive the lake-brine into the pans; but this season the whole brine will be converted into salt.

Construction.

27. The construction of the retaining wall is simple, and is effected by laborers fixing two rows of wooden piles or pegs about eighteen inches apart firmly into the soft mud. A lining of grass is arranged on the inward faces of the pegs, and mud is dug up from the outer sides and filled into the intervening space. The height of these walls is regulated by the density of the brine, and varies from one and a half to three feet. In 1864,† when the lake was unusually high, and the brine consequently weak, walls *three* feet high had to be formed to retain two feet of water. When the present enclosure from which we are now obtaining our present salt crop was being made, it required a wall one and a half feet high to enclose one foot of water.

Cost of construction.

28. The cost of this work varies according to the demand for wood and grass, or the market value of labor; but the following may be given as an average rate per 100 yards:—

‡ 600 pegs at 15 per Rupee	Rs.	40	0	0
800 poolas at 100 per „	„	8	0	0
Labor	„	6	4	0
Total ...		54	4	0

* At Nawah and Goodah a third method is resorted to, called *bunda*. This is the setting aside of different portions of the shore to the salt-making classes, and allowing them to excavate reservoirs from one to four in number; these reservoirs are about thirty feet long by fifteen broad, and about six deep. Around these reservoirs are excavated shallow pans, fifty feet long by twenty broad, and about six feet to one and a half feet deep. From the lake, channels are excavated to add to the reservoir brine, and the concentrated brine thus thrown into one of these pans yields in the hot months, every five or six days, according to the strength of the brine, about fifty maunds of salt, or about two seers per square foot.

† The excessive rains of 1862 altogether precluded salt from forming during that year, and the following rains of 1863 still prevented manufacture. It was not till 1864 that a crop was obtained, and then with increased labor, owing to the weak state of the brine.

‡ These rates prevailed formerly, when the joint officials had the power of obtaining wood as required. Wood is now difficult to obtain, and as we are not in possession of the power of the former officials, the rates will be higher when we have to enter the market.

THE SAMBHUR LAKE.

29. After the close of the rains arrangements are made to commence operations, and according to the depth of the lake a site is fixed, and either new walls made or old walls repaired, as the exigencies of the season require. Season of construction.

30. The retaining wall made by the joint Governments of Jeypoor and Jodhpoor, previous to our assuming charge, measures 7,750 yards in length. This was made at a cost of Rs. 1,100, or equal to Rs. 14-3-1 per 100 yards. This work was undertaken by a contractor, and he was allowed to use the old pegs taken from the retaining walls constructed in previous years. Present operations.

31. The season of production depends on the amount of water in the lake and the condition of the atmosphere. In average years crops can be obtained from October till May, or during eight months of the year; but the number of these crops depends entirely on the strength of the brine, and the dryness of the air to produce rapid evaporation. In the cold weather a month or more is required for a crop to form, whereas in the hot season about eight days will be sufficient. Season of production.

32. When a crop is ready for extraction, laborers of both sexes, including many children, enter the salt pans provided with baskets. The salt rests on a layer of soft, tenacious mud, through which they have to wade, and by gently inserting their out-spread hands under the salt crust, they are enabled to lift it up comparatively clean and throw it into their baskets. Were a rake of any kind used for this purpose, loss would be incurred, in that either too much salt would be left imbedded in the mud, or too much mud would be collected with the salt. When a basket is filled, the owner carries it to the extremity of the muddy part in the direction of the store, and from that point it is carried either by laborers, carts or bullocks directly to the store. Very often the extraction and storage is done by the same laborer. Mode of collection.

33. Our present salt field encloses an area of 411·525 acres, and a number of experiments showed that the average weight of a square foot of the present crop equalled 1·78 seers. Extent of present area worked.

34. These figures show that the present crop amounts to maunds 797,706, equal to maunds 1938·42 per acre. Estimated yield per acre.

35. In addition to this quantity, if we can procure sufficient labor, we anticipate (during this exceptionally favorable season for the production of salt) adding largely to our stores from beyond the present retaining wall, and also to the westward of it. In both of these directions, large beds of salt exist which have formed without entailing any expense. The former officials tell me that were a sufficient number of laborers forthcoming, 20,00,000 maunds might be stored. Additional sources of supply.

36. This method is only resorted to when the lake water is too high to permit of the first or retaining-wall method being adopted. Only three of these at present exist in the lake; two are in very good repair, but the third is in a most dilapidated condition. Kyars or embanked enclosures.

In 1861, six of these enclosures were in existence; but the excessive rainfall of 1862,* in spite of the strenuous exertions of the officials in charge of the lake, swept them all away; the

* In 1862 about forty inches of rain fell, and the lake rose so high that some of the streets in the town of Sambhur were under water.

two which now exist were re-built in 1863, but no salt was obtained from them till the following year.

Their object.

37. The object of adopting this method is, that when the lake water is high, and no crop can be expected by the other method, brine can be admitted into these enclosures; and as its density increases, it is augmented by further additions until a sufficient supply of brine so highly concentrated as to yield a profitable crop of salt has been obtained. But if no lake water surrounds them, and it is deemed expedient to work them, reservoirs are excavated close to their outer edges, and the brine which they supply is daily admitted into the pans.

Construction.

38. In the bed of the lake enclosures are formed with embankments 350 feet long by 80 feet wide; two rows of strong piles, averaging six feet in length, are firmly fixed into the mud, about three and a half feet apart; bundles of grass are then laid along the inner sides of the piles, and the intervening space is filled up with mud. The part the grass plays is, that it prevents the mud from slipping, and resists the erosive action of the surrounding water. The bed of the enclosure is separated into pans by low retaining walls similar to those mentioned in paragraph 26, and in the embankment opposite to these walls are sluices, so that one sluice may supply two pans with brine. From the embankment, projecting into each pan, is built a small pier-like basin higher than the level of the outer water, and when the water in the pan is too high it is bailed into this and flows into the lake.

Cost of construction.

39. The cost at the present season, when the bed of the lake is dry, for making 100 yards of embankment would be as follows:—

		Rs.	A.	P.
Piles, 800, at 8 per Rupee		100	0	0
Poolas, 2,500, at 100 bundles per Rupee		25	0	0
Labor, 200 laborers, at 2 annas per day		25	0	0
Total ...		150	0	0

If the laborers had to work in water, the cost of labor would be double the rate I have given. These enclosures may vary in size. For one of similar dimensions to No. 2 kyar, which measures 350 yards in length by 80 yards in breadth, the cost would be nearly as follows:—

	Rs.	A.	P.
* Embankment	1,290	0	0
Basins	18	0	0
300 yards divisional walls, at Rs. 54-4-0 per 100 yards, *vide* paragraph 28	162	12	0
Total ...	1,470	12	0

The impregnation of the piles with brine acts as an antiseptic to the wood, and preserves it for a very long period. Such an enclosure may, therefore, last, with occasional repairs to grass and earthwork, for twenty or thirty years.

Season of production.

40. At the commencement of our operations, orders were given to work these enclosures; but afterwards, as a considerable further sum would have had to be expended in cleaning out the salt pans and excavating reservoirs, it was deemed inexpedient to expend more money at present on this work, as our funds during the present favorable season could be expended with more profit to Government on the extraction and storage of salt from the bed of the lake. Besides, it was diverting a considerable portion of our labor from our principal operations.

* The note at paragraph 28, regarding the rate of timber, also applies to this.

Still, as money had been expended on preliminary operations, as much of the enclosures are being worked as the reservoirs can supply with brine.

Methods of supplying the pans with brine from the reservoirs compared.

41. Formerly the brine was extracted from the reservoirs by means of a hand-basket worked by two men; now a $10\frac{1}{2}$ feet-lift pump is being employed in one of them; but the utility of either the pump or the hand-basket is less than that of the chánch, or earthen bucket worked by a weighted lever. This is a lever of the first order with the fulcrum situated unequally, the power being nearer to it than the weight.

1st.—The pump.

42. To work the pump continuously, three men are required, as the continued strain on the arms cannot be sustained by two men, and one man is required to act as a relief.

The pump has a $10\frac{1}{2}$ feet lift and throws out 1,835 gallons of brine per hour. This multiplied by 277·28, the number of cubic inches in a gallon, and divided by 1,728 (the number of cubic inches in a foot) gives 294·45 cubic feet per hour. Taking six hours as an average day's work, we have $294{\cdot}45 \times 6 = 1766{\cdot}70$ cubic feet per day.

2nd.—The basket.

43. A jhupoola or basket contains 176 ounces or 1·1 gallons, and this quantity can be thrown out by two men twenty times in a minute, thus giving a discharge of 1,320 gallons, or 211·81 cubic feet per hour. But frequent delays occur in ropes breaking and the men getting out of the swing. With six hours' work, this gives an out-turn of 1270·86 cubic feet per day.

3rd.—The bucket.

44. From the results obtained from a series of experiments with the chánch, or earthen bucket worked by a weighted lever, one of which is now being used to empty a brine reservoir, a much better result than either the pump or basket gives is being obtained; and the method might be improved on, by increasing the size of the bucket, and having it made of galvanized iron, instead of clay. The earthen bucket at present in use contains 380 ounces or 2·37 gallons, and can be discharged by one man ten times in one minute, thus giving an out-turn per hour of 1,422 gallons or 228·66 cubic feet, or a six hours' out-turn of 1371·96 cubic feet.

The comparison of the results thus obtained is as follows:—

		Cub. ft. per day.		Cub. ft. per day.
Pump ...	3 men ...	1766·70	One man's work ...	588·90
Basket ...	2 „ ...	1270·86	Ditto ...	635·43
Bucket ...	1 man ...	1371·96	Ditto ...	1371·96

From the above figures it will be apparent that the gain in favor of the bucket for raising water is 100 per cent. over that of either of the other methods.

Season of production.

45. As no labor excepting the opening of sluices to admit the surrounding weak brine is necessary, this method can be worked during the eight dry months of the year. Even during the rainy season, when the rainfall is slight, crops can be obtained.

Mode of collection.

46. The mode of collection from the enclosures is much simpler than from the low retaining walls. The pans have hard clay bottoms, which enable the workers to move easily about, and collect the salt together by means of small wooden rakes. It is then conveyed in baskets outside of the enclosure, and from there conveyed to the store generally by carts and bullocks.

THE SAMBHUR LAKE.

Extent of present area.

47. Although we have obtained a crop of salt from "Kyar" No. 1, it is quite unworkable, and to make it workable it would require to be thoroughly cleaned out and a new embankment built round it.

Nos. * 2 and 3 are in good repair, and contain an area of 11·95 acres.

Estimated yield per acre per annum.

48. No detail from actual out-turn can as yet be furnished, but the former officials state that twenty-four† crops can be obtained from each enclosure during the year. Enclosure No. 2 is said to yield 6,570 maunds, and No. 3, 6,340 maunds, or a total of 12,910 maunds per out-turn, and this divided by their combined areas, *viz.*, 11·95 acres, gives a yield per acre per out-turn of 1,080 maunds, or a yearly out-turn of 3,09,840 maunds, or a yield per acre per annum of 25,920 maunds.

STORAGE.

Selection of sites. Former system.

49. The sites for the storage of salt have hitherto been fixed in a very hap-hazard manner. Wherever the laborers chose to extract salt, a store was formed, and a guard was placed over it.

Present system.

50. Now sites are fixed where the nature of the shore permits of it, with regard to these stores being well above the high-water level of the lake, and concentration of these, where no additional outlay has to be incurred for storage, is being gradually effected.

Concentration.

51. At the commencement of our operations, twenty-nine such sites were being guarded, but now they are being reduced to fifteen. This reduction is being effected by clearing away the salt from closely adjoining sites, and leaving the intervening space to be guarded by our men.

Method of storage.

52. When the daily out-turn of salt has been estimated, it is thrown up into large conical, or sometimes oblong pyramids, which vary in cubical contents from about three thousand to one hundred thousand maunds. When the storage of a heap is complete, to prevent the lodgment of rain, the salt is firmly beaten on the outer surface and smoothed from apex to base.

Advantages derived from this method.

53. This system of storage is being continued, as it will save complication in accounts by enabling us to have one instead of several heaps representing a store. It will also prevent wastage during the rains, by offering a less surface area to be affected, and it will be easier for the man on guard to watch one heap than several.

Quantity stored.

54. Up to the close of the official year, only 30,640 maunds were extracted and stored; a much greater quantity would have been stored but for the inclement state of the weather during the month of March. The greatest quantity stored in one day was 2,288 maunds, and this was on the 14th March, just prior to the commencement of the series of storms which occurred.

Very insufficient.

55. ‡ Owing to the causes which have entailed an unusual paucity of labor, referred to more fully in paragraph 65, our daily

---

* No. 2 contains .. .. 6·08 acres
„ 3 „ ... ... 5 87 „

† During the four cold weather months two crops per month are obtained, and during the four hot weather months four crops per month; this gives a total of twenty-four crops.

‡ Out-turns for eight years as furnished by the officials of the joint Government.

Sumbut.	A. D.			Maunds.	Sumbut.	A. D.			Maunds.
1919-20	1862	...	...	1,504	1923-24	1866	...	...	8,59,959
1920-21	1863	...	..	1,03,212	1924-25	1867	...	...	13,61,637
1921-22	1864	...	...	11,02,996	1925-26	1868	...	...	7,54,505
1922-23	1865	...	...	8,76,973	1926-27	1869	...	...	10,13,412

Or an average for eight years of maunds 7,59,274.

out-turn from the lake for 51 working days has only been maunds 600·8 per day; whereas to extract 8,25,000 maunds, taking the present working season to extend from 1st March to 15th July, or 137 days, we should be storing per day over 6,000 maunds.

Cost of storage per maund and per 100 maunds.

56. Placing out of account the cost of supervision, the actual cost of storage (including extraction) averages about 4·8 pies per maund, or Rs. 2-8-0 per hundred maunds; but owing to money having been spent in cleaning salt pans and excavating reservoirs, the cost of our present storage amounts to Rs. 3-1-9·4 per 100 maunds.

Quality of the salt.

57. The quality of the present crop is very good, the side of the crystals averaging about half an inch. Very few of the crystals are to be found as perfect cubes, the general form being that of a truncated pyramid. Some of these crystals attain a large size, their sides sometimes measuring one and a half inches.

Difference in color.

Blue.

58. The salt obtained has three different colors. The most prevalent color is a bluish-grey of several tints. This color is caused by the penetration of the fine silt of the lake into the interspaces of the crystals. This salt is highly esteemed in the North-Western Provinces, and is the chief salt taken from this towards Agra.

White.

59. The next is the white. This salt is nearly opaque, none of its crystals ever being possessed of the beautiful transparency of the Deedwana, Puchbuddra, and Runn of Cutch salts. It is taken pretty well all over the country, but the people about Jeypoor are said to affect it most.

Red.

60. All shades of this color are to be met with, from an exquisitely delicate roseate tint to a deepish claret color. Some observers are of opinion that this color is due to the presence of microscopic algœ; some think it is due to animalculæ, while others think that it is due to some mineral agent, such as the salts of cobalt, which with the carbonates of soda and ammonia give similarly colored precipitates. As yet we have no definite information as to the cause. With regard to the two first theories, my microscopic examinations of the substance have shown no organic forms, and the third theory is combated by the fact, that the color disappears with the application of heat. Owing to this red color the salt is said to be in great request about Tonk and its neighbourhood.

Weather favorable during February.

61. The great scarcity of rain which occurred in this as well as the other parts of Rajpootana during 1869, was the means of leaving the lake very shallow, and up to the time of our taking charge of the lake in February, this circumstance contributed to make the present salt crop an unusually large one.

Unfavorable during March.

62. About the beginning of March the weather became cloudy, and continued more or less so up to the close of the month. On the 16th we were visited with a very severe thunder-storm, accompanied by a heavy fall of hailstones and rain, and on six other days between the 16th and 31st, *viz.*, the 17th, 19th, 21st, 22nd, 23rd, and 29th, we had storms varying in intensity, with smart showers of rain.

Its effects on the salt crops,

63. This untimely rainfall has caused no injury to the salt crop; the rain will rather do good, in that it has dissolved the efflorescence from the higher levels, and the brine thus formed will allow the crystals in the lower levels to attain to a larger size.

and labor.

64. But while no loss has accrued to the salt crop, our operations have been retarded very considerably. The shore of the lake is so impregnated with salts, that the slightest rainfall converts hard soil into a perfect puddle, and when in this state, neither carts nor bullocks can be employed, and the laborers object to work in it. The cloudy weather not only kept many in their villages in anticipation of rain, but it diverted our labor to agriculture, as the owners of standing, and in many cases, unripe crops, preferred cutting them in their present state to incur the possible risk of their total loss in the event of another hail-storm.

LABOR.

Difficult to obtain, owing to the great mortality during the recent famine,

65. The past famine, which was so severe in this part of India, was the means of causing great mortality in the neighbourhood of Sambhur. Whole villages were depopulated by disease, and within our own jurisdiction many hundreds of men and cattle were swept away.*

and the greater portion available being engaged in agriculture.

Labor the only essential to make the present year's collection of salt an unusually large one.

66. It therefore followed that, at the commencement of our operations, very little labor was forthcoming, the greater portion of that available being employed on agriculture. Unless we can very greatly increase the number of laborers, it will be impossible to take advantage of the present favorable season in collecting such a magnificent crop as we otherwise would have been in a position to collect.

Excepting agriculture there is no other outlet for labor.

67. As our rates are remunerative, and as there are no other works to divert it from us, we have at present all the available labor of the neighbourhood, excepting those employed on agriculture. But as the greatest number which we can possibly secure during the present season (and this number is stated to be about 600) is very insufficient for our requirements, it is to be hoped that foreign labor may be made available.

Still the greatest number available is insufficient for our requirements.

Measures adopted to obtain labor.

By proclamation.

68. At the commencement of our operations, a proclamation was issued throughout the joint jurisdiction, informing the villagers that employment was procurable at the sites of manufacture.

The purport of this order was made known through our own officials, and through the kindness of the joint officials of the Jeypoor and Jodhpoor Governments, to the heads of all the surrounding villages. Our own men were also daily employed in coaxing labor to the works from the town of Sambhur.

By our own establishment.

Two difficulties which deter us from obtaining labor.

69. Two great difficulties, each of sufficient importance in itself, tend to deter us from commanding as ample a supply of labor as we otherwise could.

1*st*.—Our total inability to coerce.

70. The first and most important obstacle to our obtaining labor is, that as we have only to deal with the salt revenue, we cannot mildly coerce labor as the former owners did, when holding conjointly the land and the salt revenue. Formerly, the surrounding villagers were compelled to turn out for the collection of the salt crop.

2*nd*.—The nature of the work.

71. The second obstacle is the nature of the work. At present the work is well removed from the immediate neighbourhood of the town, and the laborers have to start early so as to stop work early in the forenoon. When the work is reached, they have to travel to and fro through some two or three hundred

* In the village of Rengi, the whole population, consisting of about 150 men, women, and children, were carried off; while in the villages of Nangul, Khorsina, Sirthulla, &c., about three-fourths of the people, who depended on the salt manufacture for a livelihood, also died.

yards of black fœtid mud* over one foot in depth. Every step they take carries down loose crystals of salt, and as they withdraw their feet from the mud, the sharp angles of the crystals are pressed against the flesh and produce flesh wounds, which, with the constant contact with the mud and brine, continue for some days in a state of irritation, and terminate in festering sores.

This greatly deters labor from coming from a distance, and the salt manufacturing classes, presumably with the view of checking the importation of foreign labor, assert that were outsiders to attempt the work, the sores produced by the salt would most assuredly cause their death.

72. The principal caste employed on the salt operations is called Burrar; but this caste, like the Nooniahs or saltpetre manufacturing caste in the North-Western Provinces and North Behar, have been much reduced in numbers through disease and famine, and their work has been taken in hand by other castes. Formerly the Burrar caste consisted of Rajpoots, but about six hundred years ago the greater portion of them were *Mahomedanized* by Ala Oodeen Ghazee. Castes employed.

The castes which now engage in our work are—

Hindu.		Mahomedan.	
Burrars ...	... Salt extractors.	Burrars ...	... Salt extractors.
Khateeks ...	... Tanners.	„ ...	... Field laborers.
Thories ...	... A caste of sweepers.	„ ...	... Cart-men, and all the poorer people who cannot find lighter or more remunerative work.
Reghurs ...	... Shoe-makers.		
Chumars ...	... Makers of coarse cloth at Sambhur.		
Malies ...	... Gardeners.		
Tailees ...	... Oil-makers.		

73. At the more distant works, some laborers have made an encampment and sleep on the shore of the lake, but those from Sambhur have to leave their homes about 3 or 4 A. M., so as to earn their day's pay before the heat of the day commences; work is generally stopped by ten or twelve in the forenoon, but during the hotter months it ceases about 9 A. M. Hours of labor.

74. In the following table the daily earnings of the different kinds of labor are shown :— Description of labor employed, and the average daily wages obtainable.

Description of labor employed.	Extraction.		Porterage.		Extraction and Porterage.	
	Average daily work.	Average rate of 2·85 pies per maund.	Average daily work.	Average rate of 1·94 pies per maund.	Average daily work.	Average rate of 4·8 pies per maund.
	Mds.	Rs. A. P.	Mds.	Rs. A. P.	Mds.	Rs. A. P.
Men	13·37	0 3 2·10	15·42	0 2 5·91	10·07	0 4 0·33
Women ...	10·45	0 2 5·78	12·24	0 1 11·74	7·80	0 3 1·44
Children ...	5·60	0 1 3·96	6·30	0 1 0·22	4·50	0 1 9·60
Carts†	50·00	0 11 10·50	60·00	0 9 8·40	30·00	0 12 0
Bullocks† ...	20·00	0 4 9	30·00	0 4 10·20	15·00	0 6 0

* This stench is produced by the decomposition of algæ and the larvæ of a species of Neuroptera, both of which abound in the lake. The chemical change which results from this is, that the sulphate of soda is converted into sulphuret of sodium, and the sulphuret being decomposed by the action of carbonic acid, produces sulphuretted hydrogen.

† For extraction by carts and bullocks roads are made by forcing the mud aside and leaving the harder under portion to become baked by exposure to the sun's rays. The carts and bullocks are taken as far out as is possible with regard to the practicability of such clearance, and the salt is brought to that point from the lake by the owners of the carriage and their families.

DELIVERIES.

STOCK.

Estimated quantity in store.

Additions thereto.

75. On the 1st February the existing stock of salt made over to us was roughly estimated by the conjecture of the former officials to amount to 8,97,236 maunds.

76. In forming this estimate, many detached heaps of salt varying in quantity, which had been made over to religious castes and servants of the state, were omitted, and these increased the total stock to 9,10,077 maunds. In addition to this, 138 maunds were paid for by the inhabitants of Sambhur, and this increased the total estimated stock to 9,10,215 maunds.

Sales.

77. During the two months of our operations, 14 heaps have been cleared away, and the difference between the actual out-turn and the estimated quantity in each heap disposed of will be seen from the following table :—

Estimated quantities in heaps compared with actual out-turn,

78. *Table showing stores cleared during February and March, 1870, with the estimated quantity in each, compared with the actual out-turn :—*

No. of Heap.	Estimated quantity.	Actual out-turn.	Excess.	Deficit.	Net Excess.	Net Deficit.	Remarks.
		Mds. Srs.	Mds. Srs.	Mds. Srs.			
1 ...	4,265	6,564	2,299	...			
2 ...	15,040	17,822	2,782	...			
3 ...	17,625	19,702 20	2,077 20	...			
4 ...	30,550	32,181	1,631	...			
5 ...	19,975	23,939 20	3,964 20	...			
7 ...	29,326	30,962	1,636	...			
16 ...	10,575	6,718	...	3,857			
17 ...	11,750	9,728	...	2,022			
18 ...	14,100	13,267	...	833			
19 ...	17,625	10,526 13	...	7,098 27			
20 ...	19,975	13,361	...	6,614			
21 ...	9,870	8,287	...	1,583			
36 ...	14,476	12,005	...	2,471			
37 ...	11,015	13,854 27	2,809 27	...			
Total ...	2,26,197	2,18,918	17,199 27	24,478 27		7,279	

result in deficit.

79. From the result it will be observable that although considerable excesses occurred in those heaps first disposed of, latterly the deficiencies more than counterbalance them.

Approximate amount of present stock.

80. The total sales during February and March amount to 2,37,093 maunds, and that deducted from the estimated stock received, plus the new salt stored, will show approximately the existing stock at the end of the official year :—

Estimated old stock, maunds			9,10,215
Sales		2,37,093	
* Deficit, as per table, *vide* para. 78		7,279	2,44,372
Balance of			6,65,843
Balance of estimated old stock, maunds ...			6,65,843
New stock			30,640
Approximate amount of present stock, maunds ...			6,96,483

* It is impossible to show the total deficit until the total deliveries have been made, *i. e.*, until all the old stores have been cleared.

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81. No salt has yet been applied for according to the terms of the treaties by either the Jeypoor or the Jodhpoor Durbars.

No salt has been applied for according to treaty.

82. At the commencement of our work, some delay was experienced by our attempting to weigh by scales and measures of capacity the whole amount of despatches.

WEIGHENMTS.
Delay arose through attempting to weigh entire despatches.

83. It was found that to weigh 100 maunds by one pair of scales occupied about 50 minutes, and to weigh 100 maunds by one measure of capacity occupied about 1 hour and 40 minutes.

Portion now weighed fixed at 10 per cent.

As our average daily weighments amount to about 5,000 maunds, but the actual sales range from about 2,000 to 8,000 maunds, the above figures will show that it was impossible to weigh each despatch, and it was arranged that only 10 per cent. of each should be selected for weighment, and this system is working very well.

84. Where deficiencies or excess occur, salt is either given to, or taken from, the trader.

and differences in weighment settled in salt.

TRADE.

85. The salt trade during the two months under review is said to be decidedly brisk when compared with former years.

GENERAL CONDITIONS.
Good.

86. The great severity of the past famine induced the Native Chiefs to exempt grain from taxation, and this induced many traders into the Rajpootana States.

The causes which led to this.
The import of grain.

87. Prior to our assuming charge, a tempting but erroneous rumour was created by some speculative mind, to the effect that our Government duty of Rs. 3 per maund would be levied on all salt sold by us after the 1st February, and the thought of realizing this splendid profit led the traders to effect large purchases of salt.

An erroneous rumour regarding duty,

88. As their object was to clear as much salt as possible out of the joint jurisdiction within a given time, the competition for carriage gradually increased, until the rates reached to about 50 per cent. over the usual average. The Punjabees and others who had been employing their carriage in the import of grain, flocked in immense numbers to Sambhur to take advantage of the high rates of carriage.

which tempted traders to speculate rashly,

89. On the 1st February the market had ample carriage at command, and the removal of the transit dues on salt throughout the Jeypoor States induced traders from a distance to speculate in salt, and this again produced a rivalry for carriage between the speculators and the local merchants, as the former were willing to pay higher rates than the latter.

and the removal of the transit duty on salt.

90. Salt is exported from this by six main arteries to supply the chief marts of the Punjab, North-Western Provinces, and Central India.

COURSE OF TRADE.
Tracts supplied,

91. Towards the north, it is taken to the salt mart of Rewaree to supply the Sirsa, Hansie, and Delhi districts.

to the North,

92. Towards the north-east, it is taken to the salt marts of Ulwur and Ferozepore, to supply the Goorgaon, Rhotuck, Bareilly, Muttra, Meerut, &c., districts.

North-East,

93. Towards the east to Agra, to supply Cawnpore, Mirzapore, Oudh, and some parts of Bundelkund.

East,

94. Towards the south-east, it is taken to the salt mart of Kerowlee to supply the Native States of Gwalior and Dholpore,

South-East,

and in nearly the same direction it is taken to the salt mart of Jhansie to supply Bundelkund, Saugor, Bhopal, &c.

South,

95. Towards south and east, it is taken to the salt mart of Tonk, to supply the Native States of Tonk, Boondie, Kotah, Jahrapatan, &c.

Road dues levied *en route* to Rewaree.

96. Towards Rewaree, 1½ annas per maund is levied at Narnowl in the Puttialla State.

Ferozepore.

97. Towards Ferozepore and Ulwur, 2½ annas per maund is levied along the roads by the Thakoors in the Ulwur State.

Agra.

98. Towards Agra, 2 annas per maund is levied in the Bhurtpore State; the rate is fixed by the Bhurtpore officials at a village called Ulupoora, but the payment is made to the Durbar official in the city of Bhurtpore.

Kerowlie and Jhansie.

99. Towards Kerowlie, 1½ annas per maund is levied in the Kerowlie State; but if the salt is in transit to Jhansie, besides the Kerowlie transit dues, in the Gwalior State is levied a due of Re. 1-4 per bullock or Re. 1-14 per camel; allowing a camel load to be 6½ maunds and a bullock load to be 2½ maunds, the average rate will be about 5 annas per maund.

Tonk.

100. Towards Tonk, 7½ pies per maund is levied by the Tonk officials, but if in transit to Boondee, the Boondee officials levy 1½ annas per maund. The Bunjara traders who ply towards Jhansie often go in the Tonk direction for fodder, and then the Gwalior duty of 5 annas per maund is levied in the Gwalior State.

Classes engaged in trade.

101. The principal traders engaged in the Sambhur salt trade belong to the Bunniah caste. They deal according to their means on their own account, and act as stock brokers for salt merchants at the various marts. The method of their operations is fully described in paragraph 110.

Traders who employ their own carriage.

102. Bunjaras of the Maro Bhat caste and some Brahmins of Kerowlee are the only class who deal in salt and use their own carriage for its export.

Classes who ply for hire only.

103. The Punjabees who come with camels from the Punjab, the Aheers, &c. (cartmen), who come from Agra, Rewaree, Tonk, and Puttialla, and the Bunjaras who come from Jhansie, Saugor, and Hoshungabad, all ply for hire.

IMPORTS.

Whence derived, and whither taken.

104. Camels are brought from the Punjab to Delhi, &c., with such products as salt, grain (when necessary), and dried fruits. From Delhi they go towards Bewanee and Rewaree, where they hire their carriage to convey coarse and fine sugar and rice to Jodhpoor, Jeypoor, Oodeypoor and Ajmere, and when they have made over their despatches they proceed to Sambhur.

Bullocks are brought from Jhansie, Saugor, and Hoshungabad, and import from those directions grain, rice, coarse cloth for bags, twine, iron, and mowha (*bassia latifolia*) flowers for the manufacture of spirits.

Carts are brought principally from Agra, Puttialla, Rewaree, and Tonk. Those that come from Agra import sugar of sorts, rice, grain, clarified butter, and the flowers of the koosum (*carthamus tinctorius*) for dye. Those from Puttialla and Rewaree bring the same kind of imports with the addition of dried fruits, while those from Tonk are brought empty.

Staples locally supplied.

105. The principal imports to Sambhur are grain, rice, and mowha flowers. Large quantities of native spirits are manufactured in the town, to supply the demand of the Bunjara castes, who drink freely.

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MONEY EMBARKED IN TRADE.

106. The imports brought by these different kinds of carriage on arrival at the mart for which they are intended are made over to an agent, and if the owners of the goods wish to purchase salt with the money realized from them, the agents remit the money by hoondee to Jeypoor or Ajmere, and from these places it is again sent by hoondee to Sambhur.

Brought to Sambhur principally by bills of exchange.

107. The money embarked in the salt trade passes, as a rule, through the hands of a few extensive bankers who have agencies at Sambhur, Ajmere, Jeypoor, Jodhpoor, Kishengurh, and Khoochawan.

Drawn on extensive bankers.

108. These bankers give bills of exchange on their agencies at Sambhur, and send money as required by camel runners from Jeypoor and Ajmere.

Mode of remitting specie.

109. The only traders who risk bringing the money with them are the Maro Bhat and Kerowlee Brahmin Bunjaras, and then it is divided into sums of about fifty rupees, which each Bunjara carries in a long purse securely fastened round the waist.

Traders who bring their own capital.

110. Salt merchants from Agra, Bhurtpoor, Delhi, Ferozepore, and occasionally from Tonk, Jhansie, and Kerowlee, send agents to look after their interests at Sambhur. When the markets are in a favorable condition those agents are ordered to purchase salt. The agents then go to the Sambhur stock brokers and tell them to make arrangements for the purchase and despatch of the order. The brokers proceed to the bankers and obtain the necessary sum, which the trader must refund to the agents of the bank at the mart to which the salt is to be taken, and at the same time he has to pay for the loan of the capital an interest and exchange rate* of Rs. 3 per cent. for every twenty-five days that the money remains unpaid.

Description of the process adopted by traders when effecting a purchase of salt.

In addition to this, the broker has to be paid Re. 1-1 per 100 maunds for obtaining the money, seeing the salt cleared from our stores, hiring carriage for the despatch, and arranging about the traffic guard.

Supposing the salt to be intended for Agra, it is protected through the Jeypoor State by a Government traffic guard to the border of the Bhurtpoor State. When the despatch reaches the village of Nye-ka-Kooa, a village about a mile to the west of the city of Bhurtpoor, it is made over to an agent, who sees that the salt is emptied from the bags or carts and thoroughly dried† in the sun. It is then weighed and re-packed, and when the agent has assured himself of the actual quantity, a passport is written for to the Customs House at Agra.

The charge made for weighing and agency at Bhurtpoor is 8 annas per 100 maunds for agency and annas 8 for weighment.

On the arrival of the Government passport from Agra the despatch leaves Bhurtpoor, but sometimes despatches leave without the passport, and in the latter case it is sent by a messenger to the village of Uchnera on the Agra road, and awaits the arrival of the despatch. On the arrival of the despatch at our Customs cordon, a portion of the despatch is weighed, and when passed, it is taken to Agra and made over to the owner.

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* This gives a rate of interest and exchange equal to Rs. 43·8 per cent. per annum, or to give the details { Interest—Re. 1-4 per cent. for 25 days. / Exchange— Re. 1-12 „ Agra to Sambhur.

† The traders all agree in stating that they incur a loss by dryage between Sambhur and the Customs line of 12·50 per cent.

Traders' outlay and profit

111. The following table shows the traders' outlay incurred in purchasing and exporting 100 maunds of salt from Sambhur to the chief salt marts:—

Table showing the Traders' outlay per 100 *maunds of Salt, and the average cost and profit per maund at the chief marts.*

	Agra.	Tonk.	Kerowlee.	Rewaree.	Ulwur.	Jhansie.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Price of salt at 10 annas per maund ...	62 8 0	62 8 0	62 8 0	62 8 0	62 8 0	62 8 0
Private weighment at store	0 9 6	0 9 6	0 9 6	0 9 6	0 9 6	0 9 6
Laborers employed in digging salt from store and filling despatches ...	0 3 9	0 3 9	0 3 9	0 3 9	0 3 9	0 3 9
Offering to the shrine of Sakumbree Devee	0 7 0	0 7 0	0 7 0	0 7 0	0 7 0	0 7 0
Traffic guard on an average despatch of 500 maunds	0 12 0	0 5 7	0 12 0	0 10 5	0 8 0	0 14 5
Stock brokers' commission at Re. 1-1 per 100 maunds	1 1 0	1 1 0	1 1 0	1 1 0	1 1 0	1 1 0
Carriage (cart hire)	.....	21 14 0	.....	.....	.....	.....
Interest and remittance charge on sums expended at Sambhur	at 3 per cent. 2 0 5	at 2 per cent. 1 12 4	at 2¾ per cent. 1 10 10	at 3 per cent. 2 0 5	at 2 per cent. 1 5 4	at 4 per cent. 2 11 10
Road* dues	at 2 ans. per maund. 11 14 0 (Bhurtpoor.)	at 7½ pies 3 6 8	at 1½ an. 8 3 3	at 1½ an. 8 3 3	at 2½ ans. 13 10 9	at 6½ ans. 35 8 9
Agents' fees at 8 annas per 100 maunds at Bhurtpoor	0 8 0	.....	.....	.....	.....	.....
Weighing and re-packing salt at Bhurtpoor	0 8 0	.....	.....	.....	.....	.....
Government duty on salt at Rs. 3 per maund	262 8 0	.....	.....	.....	.....	.....
Carriage (camel hire)	84 6 0	.....	53 2 0	56 4 0	46 14 0	115 10 0
Brokerage on sales at destination at annas 14-10 per 100 maunds	0 13 0	3 1 0	1 12 0	1 12 0	1 12 0	2 10 0
Weighing of 87½ maunds at 8 annas per 100 maunds	0 7 0					
Godown hire, 87½ maunds	0 7 0					
Cost of 87½ maunds	429 0 8	95 4 10	130 5 4	133 11 4	128 15 4	222 4 3
Cost per maund	4 14 5	1 1 3	1 7 8	1 8 5	1 7 6	2 8 8
Average proceeds of a maund ... ... per maund.	5 0 0	1 2 0	1 8 0	1 9 0	1 8 0	2 10 0
Profit	0 1 7	0 0 9	0 0 4	0 0 7	0 0 6	0 1 4

* Calculated on 100 maunds minus 5 per cent. dryage = 95 × 2 = Rs. 11-14.

*Table of rates for the Traffic Guards who convoy despatches "*en route*" to the chief marts.*

Name of Mart.	Kind of carriage employed.	Village at limit of Jeypoor territory.	Distance in miles from Sambhur.	Days occupied in going.	Days occupied in returning.	Total number of days.	Cost of guard at 4 annas per day.
							Rs. A. P.
Agra ...	Camels	... ...	...	10	5	15	3 12 0
	Bullocks	Mowha ...	100	19	5	24	6 0 0
	Carts	... ...	...	13	5	18	4 8 0
Tonk ...	Camels	... ...	...	4	2	6	1 8 0
	Bullocks	Ajmere ...	40	8	2	10	2 8 0
	Carts	... ...	...	5	2	7	1 12 0
Kerowlie ...	Camels	... ...	...	10	5	15	3 12 0
	Bullocks	Gungapoor ...	100	17	5	22	5 8 0
	Carts	... ...	...	13	5	18	4 8 0
Rewaree ...	Camels	... ...	...	9	4	13	3 4 0
	Bullocks	Patun ...	90	15	4	19	4 12 0
	Carts	... ...	...	11	4	15	3 12 0
Ulwur ...	Camels	... ...	...	7	3	10	2 8 0
	Bullocks	Tala Dhola ...	70	12	3	15	3 12 0
	Carts	... ...	...	9	3	12	3 0 0
Jhansie ...	Camels	... ...	...	12	6	18	4 8 0
	Bullocks	Madhopore ...	120	23	6	29	7 4 0
	Carts	... ...	...	15	6	21	5 4 0

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CARRIAGE.
Kinds employed.

112. Camels, bullocks, carts, and asses are the carriage employed for the export of salt.

Exports effected by each kind.

113. The following table will show the amount of salt exported by each kind of carriage :—

		Number of Camels employed.	Number of Bullocks employed.	Number of Carts employed.	Number of Asses employed.
	Mds.				
Actual export of salt ...	236,955	18,915	31,825	998	526
Average loads ...	...	@ mds. 6½	@ mds. 3	@ mds. 18	@ md. 1
As per average loads of carriage employed ...	236,912	Mds. 122,947	Mds. 95,475	Mds. 17,964	Mds. 526
Difference ...	Mds. 43				

Compared.

114. On comparing the operations of each kind of carriage employed we find that—

Camels exported	51·90	per cent.
Bullocks „	40·30	„
Carts „	7·58	„
Asses „	0·22	„
Total ...	100·00	

Relative proportion which one kind of carriage bears to another.

115. The subjoined table will show the relative proportion in numbers of the different kinds of carriage :—

	Camels.	Bullocks.	Carts.	Asses.
Camels	1·00	1·68	0·05	0·028
Bullocks	0·59	1·00	0·03	0·016
Carts	18·95	31·89	1·00	0·527
Asses	36·00	60 00	1·89	1·000

Exports of salt to the chief marts by each kind of carriage.

116. During the past year the traders were in the habit of entering as the destination of their goods any village just out of the Jeypoor boundary,* and this precludes my furnishing a table showing exactly the actual quantities which went to each chief mart, but the following table will show approximately the quantities which went in the directions of the chief marts, and the numbers of each kind of carriage employed :—

	Kinds of carriage employed.				
	Maunds.	Camels.	Bullocks.	Carts.	Asses.
Agra	99,203	11,682	9,491	176	171
Tonk	59,966	1,215	9,682	454	74
Kerowlee	24,265	1,371	5,851	47	13
Rewaree	22,861	2,270	2,877	26	29
Ulwur	18,753	1,378	2,737	276	221
Jhansie	† 10,407	999	1,187	19	18

Cost of carriage, affected by imports, and demands for salt.

117. The general cost of carriage along the various routes varies according to the import trade which draws it into the neighbourhood, and to the urgency with which the salt merchants may wish to take advantage of increased rates at any of the chief salt marts.

* Now all despatches have their final destinations entered.

† A portion of the salt which is entered for Tonk must have been intended for Jhansie, but owing to reasons given in para. 116, exact detail cannot be furnished.

General cost of carriage per maund to the chief marts supplied.

118. The distances of the chief marts from Sambhur, the days occupied *en route*, and the average rates of the different kinds of carriage, as given in the following table, have been obtained from the principal traders of Sambhur.

As this information is of importance, care will be taken to prepare reliable tables and sketch maps of the Sambhur salt trade during the current year.

Chief Marts.	Distance from Sambhur, miles.	Kinds of carriage.	Days occupied.	Average rates of carriage on 100 maunds.			Rate per maund.			Remarks.
				Rs.	A.	P.	Rs.	A.	P.	
Agra ...	390	1st Camels ...	23	84	6	0	0	13	6*	Hire paid in arrears.
		2nd Bullocks...	45	81	4	0	0	13	0	Ditto in advance.
		3rd Carts ..	30	75	0	0	0	12	0	
Jhansie ...	260	1st Bullocks...	60	112	8	0	1	2	0	Ditto in do.
		2nd Camels ...	30	115	10	0	1	2	6	Ditto in arrears.
Ferozepore	144	1st Camels ...	15	59	6	0	0	9	6	Ditto in do.
		2nd Bullocks .	25	56	4	0	0	9	0	Ditto in advance.
		3rd Asses ...	15	56	4	0	0	9	0	
Rewaree...	150	1st Bullocks...	25	53	2	0	0	8	6	Ditto in do.
		2nd Camels ...	15	56	4	0	0	9	0	Ditto in arrears.
		3rd Carts ...	20	53	2	0	0	8	6	Ditto in advance.
Kerowlee	120	1st Bullocks...	20	50	0	0	0	8	0	Ditto in do.
		2nd Camels ...	15	53	2	0	0	8	6	Ditto in arrears.
		3rd Carts ...	15	50	0	0	0	8	0	Ditto in advance.
Tonk ...	60	1st Carts ...	8	21	14	0	0	3	6	Ditto in do.
		2nd Bullocks ..	12	21	14	0	0	3	6	

PENAL ACTION.
PETTY THEFTS.

How dealt with.

119. During the first few days of our operations, two or three cases of petty thefts were brought to my notice, but as on investigation these were found to have been committed more through ignorance of our rules than intentional smuggling, and were besides of such a trifling nature, the offenders were dismissed with a severe reprimand.

Leniency politic.

120. Formerly the people about Sambhur were allowed to take away salt for their private consumption without let or hindrance, therefore to have tried and punished the first few offenders under our rules until those were well promulgated would have been harsh and impolitic.

NO CASE HAS BEEN TRIED BY SAMBHUR LAKE COURT.

121. Excepting the above cases no offence of a sufficiently grave nature against our Customs Rules has occurred to warrant investigation and trial in the Sambhur Lake Court.

ATTEMPTS AT STEALING SALT.
Two cases.

122. Since the 1st February only two attempts at stealing salt have been made. Both these cases occurred at places which are well apart from our operations, and were not, up to the time of these attempts, thought worth guarding. The first attempt was made early in February, but it was considered more as a trial attempt to see what action we would take.

First attempt at eastern extremity.

123. This was at the eastern extremity of the lake, and the establishing of two posts, one at Kheggera, and the other on

* In the column showing the cost per maund it will be seen that the camel carriage is invariably paid in arrears, and this custom, although it increases the price of carriage, is more convenient to the trader than paying in advance.

the road which passes close to Kyar No. 3, has prevented any further attempt in that direction.

124. The second attempt was reported to me about the end of March, and from an immediate inspection of the ground it was seen that about eleven men were engaged in the attempt. The part selected for this theft was at the western extremity of our jurisdiction, close to the promontory of Mata Pahar. Second attempt at western extremity.

The salt at this particular spot is very fine grained and not such as would compete in the market with the usual production of the lake; still as robbery had been attempted, a patrolling party was placed at our westernmost post, Duryee, and no further attempts were made up to the close of the official year.

125. The men suspected in this case are said to belong to the village of Khakirda, a village in the Jodhpoor State, just outside of our jurisdiction. Villages suspected.

126. Considering the former wholesale thieving which report says was perpetrated by organized bands amounting to upwards of 2,000 men, and recognized by at least one of the joint officials in charge of the lake, it is satisfactory to think that the moral effect of our rule has done so much to restrain those professional salt stealers. Wholesale thieving on the decline.

127. At my suggestion the Officer in charge of the Asapoora Division sent one of our establishment to the village of Narána (due south from Sambhur about eight miles) to enquire about large quantities of stolen salt said to be stored there. The peon who was sent informed me that about the end of January 1870 the village contained about 17,000 maunds of salt, and that now about 10,000* maunds remain unsold. The owners sell it at annas 6-6 per maund; the officials of the Jeypoor Government charge a duty of Re. 1 per maund, and also a road due of annas 1-6 per maund. In addition to this the purchaser has to pay about 6 pies per maund for weighing, &c., or a total sum per maund of Re. 1-8-6. This salt is being sold throughout the Jeypoor State only, the purchasers effecting a saving over Government salt of annas 1-6 per maund.† Stolen salt in villages adjoining our jurisdiction.

128. Shortly after the issue of the notification, dated 29th January 1870, which ordered that on all quantities of salt above 20 seers the owners should pay at the rate of ten annas per maund into the Sambhur Customs House and receive a protective pass, or remove the salt out of our jurisdiction before the 28th February, eighty-two of the inhabitants of Sambhur showed their willingness to conform to our rules, by coming forward to pay for the salt which they had stored in their private dwellings. The quantities varied in extent from maunds 8-20 to 25 seers, and the duty on the total quantity of 138 maunds amounted to Rs. 86-4. GENERAL WILLINGNESS OF THE PEOPLE TO CONFORM TO OUR RULES.

129. The main cause of the suppression of wholesale thefts is due to the fact that better systems of guarding and patrolling are now in force. Our own men are on the alert all during the day and night, and our officers patrol at uncertain hours of the night to see that they are at their posts. SUPPRESSION OF ILLICIT TRADE due to a better system of supervision,

130. A secondary cause may be attributable to the fact, that I took special pains to make it known to all the people about and the dread of punishment.

* Of this 10,000 maunds, he states that the village of Narána contains 8,000 maunds, and the adjoining villages of Maroda, Mandpi, and Basra the remaining 2,000 maunds.

† A trader taking salt from Sambhur would have to pay 10 annas per maund to Government, and Re. 1 for every maund sold in the Jeypoor State.

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Sambhur and within our jurisdiction, that however painful it would be to exercise the powers entrusted to me, in kindness to all offenders at heart, I would inflict on the first offenders against our laws the full extent of the punishments accorded to the offences of which they were found legally guilty.

ESTABLISHMENT SANCTIONED AND ENTERTAINED ON 31st MARCH.

131. The following table shows the total strength of establishment sanctioned, and portion entertained on 31st March 1870 :—

	Supervision.		Lini Establishment.									Manufacture.						Customs Office.										Judicial Office.				Medical Establishment.			Orderlies.		Menial Establishment.	
	Assistant Commissioner.	Assistant Patrols.	Sub-Assistant Patrols.	Mohurirs.	Jemadars.	Peons.	Weighmen.	Kotegushts.	Jemadars.	Peons.	Sub-Assistant Patrols.	Stock Writers.	Jemadars.	Duffadars.	Guards.	Head Blacksmith.	Head Carpenters.	Maleos.	Head Clerk.	Accountant.	Record-keeper.	Copyists.	Peshkar.	Mohafizduftar.	Mohurirs.	Treasurer.	Tester.	Dufturee.	Sherishtadar.	Mohafizduftar.	Mohurirs.	Constables.	Native Doctor.	Dresser.	Compounder.	Jemadar.	Peons.	Bhistie.	Sweeper.
Sanctioned ...	1	3	2	4	2	60	8	3	10	73	2	6	6	6	24	1	1	20	1	1	1	2	1	1	2	1	1	1	1	1	2	4	1	1	1	1	10	1	1
Entertained on 31st March 1870.		3	2	4	2	45	6	3	10	73	2	1	5	5	24	...	...	...	1	1	1	2	1	...	1	1	1	1	1	...	...	4	...	...	...	1	10	1	1
Vacant ...	...	...	...	...	...	15	2	...	...	...	...	5	1	1	...	1	1	20	...	...	...	...	...	1	1	...	...	...	...	1	2	...	1	1	1	...	...	...	...

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OFFICERS.

132. The three Assistant Patrols employed in this Division, Messrs. Brookes, Angas, and Aleem Oollah, have worked hard and have given general satisfaction.

MEN.

Former employés have given satisfaction.

133. Considering the great laxity of discipline which pervaded all the different classes of the former employés under the Governments, it is satisfactory to have to report that all the old employés entertained by us have conducted themselves well.

Result due to the introduction of a few of our trained men.

134. They have all tried to do their work in a willing manner, and the introduction of some of the best peons from the Internal Department and Imperial Customs Line as subordinate officers has aided very considerably in producing the above results.

Pay of former employés.

135. Formerly the peons received Rs. 4 per month, but were often kept in arrears for a period of six months at a time.

Their willingness to serve.

136. The increased and regular rate of pay offered by our Government was looked on as a boon, and nearly all the former peons were eager to enter our service.

Old and infirm men.

137. When entertaining the former employés, I allowed several old men to obtain employment, but some very old and infirm men I was compelled to reject. The old men who were employed are deputed to look after the day duties of the posts, so that the younger and active men may attend to the more onerous duties of the night.

Boys.

138. According to the custom of Native States, appointments are generally hereditary, consequently many boys of about twelve years of age and upwards presented themselvs for employment, stating that they were servants of the joint Governments. Of these, a few about the age of seventeen were entertained.

Policy of entertaining former employés.

139. To have imported a new set of men for the carrying out of our arrangements would have deprived many of the inhabitants of Sambhur of their means of support, and would also have been the cause of great dissatisfaction to the people, and the means of creating a spirit of antagonism to our *regimé*. It was therefore as an act of policy on the part of our Department that this concession was made, and the conduct of the men and the paucity of salt thefts have amply justified it.

Percentage employed.

140. The percentage of the former employés of different grades now serving in the Department amounts to 43·52 per cent. of the 193 men who composed the subordinate establishment.

No difficulty experienced in obtaining candidates for employment.

141. Many finely built, active looking men swarmed to Sambhur from the neighbouring States of Jeypoor, Jodhpoor, and Kishengurh with the hope of obtaining employment, and from these were selected a number of good men who now form part of our establishment.

General good conduct of force.

142. Placing out of account some breaches of discipline (which might be expected in a newly organized force), such as leaving their posts during the day without permission, being careless on guard, and one or two cases of insubordination, all of which were firmly dealt with at the time of their occurrence, the general conduct of the force has been all that could be desired.

Castes employed.

143. The subjoined table shows the different castes employed and the percentage of Mahomedans and Hindoos on the total strength :—

	Total No. of executives sanctioned.	Total No. of executives employed on 31st March 1870.	No. of Mahomedans.	No. of Hindoos.	No. of Brahmins.	No. of Rajpoots.	No. of Kaiths.	No. of other Hindoo castes.	No. of residents in districts bordering on or part of the division.	No. of residents of distant parts.	No. of former employés entertained.
Sub-Assistant Patrols ...	4	4	2	2	...	...	2	...	2	2	2
Kotegushts	3	3	2	1	...	1	...	...	.....	3	.....
Jemadars	12	12	7	5	1	...	...	4	.....	12	.....
Foremen	6	5	4	1	...	1	...	...	5	.....	1
Duffadars	6	5	1	4	2	...	...	2	2	3	.....
Weighmen	8	6	3	3	...	3	...	...	6	.....	3
Mohurirs	10	5	3	2	...	...	2	...	2	3	2
Peons	157	142	83	59	12	25	1	21	117	25	72
Asst. Commr.'s Orderlies. Jemadar ...	1	1	1	...	...	...	...	...	1	.....	1
Asst. Commr.'s Orderlies. Peons ...	10	10	9	1	...	...	...	1	3	7	3
Total ...	217	193	115	78	...	...	...	...	138	55	84
Percentage on force employed.	.....	.....	59·58	40·42	...	...	...	...	71·50	28·50	43·52

Health of force.

144. So far as my experience goes, the vicinity of the lake appears to be unhealthy, and fever of a low type is very prevalent.* A great number of our men have from time to time suffered severely from it, and two cases amongst the peons terminated fatally.

Casualties.

145. The following table shows the casualties which occurred during the two months of our operations :—

Statement showing the Casualties amongst the Subordinate Establishment during the official year 1869-70.

	NO. OF EACH RANK AND GRADE.											
	Sub-Assistant Patrols.	Kotegushts.	Jemadars.	Foremen.	Duffadars.	Weighmen.	Mohurirs.	Asst. Commissioner's Orderlies. Jemadars	Asst. Commissioner's Orderlies. Peons.	Peons.	Total Subordinate Establishment.	Percentage of total of each kind of casualty on total Establishment.
Total sanctioned	4	3	12	6	6	8	10	1	10	157	217	.....
Total employed	4	3	12	5	5	6	5	1	10	142	193	.....
During the year died	...	...	...	...	...	...	...	...	...	2	2	1·03
Ditto dismissed ...	...	...	...	...	...	...	...	...	...	2	2	1·03
Ditto deserted ...	...	...	1	...	...	...	...	...	...	1	2	1·03
Ditto resigned ...	...	...	...	...	...	...	2	...	...	1	3	1·55
Total casualties	...	...	1	...	...	...	2	...	...	6	9	.....
Percentage of ditto	...	...	8·33	...	...	...	40	...	...	4·22	4·66	.....

Dismissals.

146. On my entertaining the old employés, a man with crippled hands concealed them under his mantle, and when the circumstance was brought to my notice, as the malformation was of such a nature as to prevent his wielding either a staff or a

* The Troop of the Jat Horse suffered very severely from fever, although happily no fatal cases occurred. On one day as many as twenty-six troopers and fourteen grass-cutters were down with it.

sword, I was compelled to dispense with his services. In the other case of dismissal, the peon absented himself from his post without permission for three days.

Resignations.

147. The cause alleged in the three cases of resignation was the unhealthiness of the place.

UNIFORM FOR THE FORCE AND DRILL,

148. With the exception of the very old men, all the peons now wear a distinctive uniform; and those near Head Quarters, who can be spared during the mornings and evenings, are being drilled by the Officer in charge of the Company of Native Infantry which is here on duty.

Differs from the Departmental uniform.

149. The present uniform is only for summer wear, and is as follows:—

Turban, red.

Coat (jumper pattern), slate colored.

Trousers (loose, but fitting closely at the ankle by means of a button), dark yellow.

Arms, a sword or carbine.

Reason for innovation

In shape.

150. As the men composing our force may at any moment be called out in pursuit of smugglers, and may have to enter the soft bed of the lake, the long skirts of the departmental coat and the tight fitting trousers would much impede their activity. The present uniform offers no such difficulties, and should the men have to enter the lake, they can roll their loose fitting trousers well up on the leg at a moment's notice.

In color.

151. No workmen could be found here to dye the coats the dark blue of the departmental color, and as the uniforms had to be made here, and the slate color was the best color available, I sanctioned its adoption.

Suggestion for the adoption of simple uniform for the superior grades in this Division.

152. Having dealt with the uniform of the subordinates, before leaving this subject, I would respectfully venture to suggest that some simple, but at the same time neat and inexpensive uniform should be recommended for the sanction of Government for the higher grades of this division.

Why urged.

153. Situated as the officers of this division are, in foreign territory, and coming continually in contact with native officials in either their public or private capacities, as the Asiatic mind is prone to any outward appearance which seems to indicate power, the moral effect of a uniform would have a beneficial effect in enhancing the value of its wearers to the Government which they serve.

TRAFFIC GUARDS.

154. The good effects of our system of traffic guards are now being appreciated by the traders. At first considerable delay was experienced by them, owing to their not quite understanding it, and in agreeing amongst themselves and fixing the shares of those who would travel under one traffic guard. Some traders with small despatches thought the rates high, and tried to persuade the officer who was arranging the clearance of despatches to accept so much per head for their bullocks; when they could not succeed in this, they preferred risking their despatch without a traffic guard. Their goods were cleared out of the outer limit, and the day after they returned and asked for a traffic guard, as their goods had been interfered with by the Raj officials, and the duty they wished to levy was far greater than they would have had to pay for a guard. As they could not then obtain a guard, they, as well as others, profited

by the lesson, and now the system is looked on as a safeguard from Thakoor interference.

Cases of extortion of road dues by Thakoors.

155. Only three cases of extortion of blackmail have been reported since we commenced operations; and considering that the system is all in favor of the Durbars, and directly against the interests of the feudatory Chiefs, who have hitherto looked upon the road dues levied on the Sambhur salt trade as a legitimate source of revenue, it is astonishing that there have been so few interferences.

Liable to increase.

156. Up to the present time, I am told that no compensation has as yet been given to the Thakoors; and if compensation is withheld, it is just possible that the Thakoors may revert to their former custom of levying transit dues, and run the risk of the charges being proved against them.

Castes employed.

Inducement to service.

157. The men composing the traffic guard are chiefly Mahomedan residents of Sambhur. The inducement for good service held out to this class while engaged in this temporary employment is, that as vacancies occur in the permanent establishment, the best men are transferred into it.

ACCOMMODATION.

For officers,

158. Gradually our officers and men are being afforded such accommodation as is consistent with actual comfort during the coming hot season.

and men.

159. I have appropriated, without any dissent on the part of the officials, four old buildings near the city for the use of the men who guard the salt in store, and at the other stores mud huts are being built by the men themselves, the cost of thatching to be borne by Government.

MISCELLANEOUS.

GENERAL SATISFACTION OF TRADERS.

160. Up to the close of the official year, the traders seem to have been as well satisfied as the nature of native traders will permit them to be with our arrangements, and accepted any salt which was opened in either of the Divisions.

As their former means cannot now obtain all they want,

161. Formerly, a judicious bribe enabled the traders to obtain the best salt in store, and now that the old stocks have to be disposed of, to enable a speedy settlement of accounts with the joint Governments, and isolated small stocks have to be cleared away, to enable the Department to arrange for the better selection of store-sites, and a more efficient guarding of the lake boundary, some heaps had to be cleared away which the traders did not consider quite up to the mark. This occasioned some dissatisfaction, and constant appeals were made to me to open other heaps.

some dissatisfaction has been evinced.

Their complaints are listened to at all hours,

and the object of the Department explained.

162. When traders have, or fancy they have, a grievance, and come to me, I make a point of seeing them at all hours and patiently hearing what they have to say, and as patiently impressing on them that no gain accrues to Government in giving them bad salt, but that where a heap has to be cleared away, no other salt will be sold till that heap has been disposed of. But if the heap is *bad*, *i. e.*, contains a large proportion of sand, or impure crust from other old heaps, if they (the principal traders of Sambhur) will submit a petition to that effect, and the officer in charge of the store will verify the same, the objectionable store will be at once closed and another heap opened.

Difficulty in satisfying so many interests.

163. As any system approaching to order is entirely foreign to the native mind, and as there are so many different interests concerned, if we attempted to satisfy each individual interest at the sacrifice of any of our departmental arrangements, our position would be on a par with the fable of the man and his ass.

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164. Their individual idea of fairness consists in a wish that Government would allow the extensive speculators to purchase an entire heap of the very best quality of salt to be made over to them at such times as they might require, and that all salts of an inferior description should be made over to outsiders and petty traders. The gain to a trader in a transaction of this kind is obvious, as he would always be in a position to command a higher market value for his goods.

The trader's idea of fairness.

165. The most amicable relation has been most studiously maintained with the native officials of the joint Governments and other well-to-do residents of the neighbourhood.

FRIENDLY RELATIONS WITH NATIVE OFFICIALS AND OTHERS.

166. All classes of the native community with whom I have come in contact have been uniformly civil and obliging.

All classes of the native community civil and obliging.

167. The people of the neighbourhood look upon the presence of British Officers as a blessing, as it frees them from much of the petty oppression to which they were subjected prior to our advent.

The presence of British Officers beneficial to the residents of the neighbourhood.

168. I would here beg to offer my thanks to the Political Agents of the joint Governments who have rendered this Division every assistance in their power; more especially would I thank Major Beynon and Captain Bradford, the Officers of the Jeypoor Agency, with whom I have come most in contact, for their support and courtesy in official matters.

THANKS DUE TO POLITICAL AGENTS.

169. In conclusion, I would beg to remark that as the present report deals with only two months of the past official year, it is wanting in much information with regard to details of manufacture and trade, which, under other circumstances, would have been furnished.

CONCLUSION.

PRESENT REPORT WANTING IN MANY INTERESTING DETAILS,

170. Due exertion will be made during the present year to obtain and note for future submission to Government all obtainable facts which bear on those important subjects.

which will be carefully collected for future submission.

R. M. ADAM,
Asst. Commr., Inland Customs.

Treaty between the British Government and the Maharaja of Jeypoor regarding the lease of the joint property in salt on the Sambhur Lake

Treaty between the British Government and His Highness S. RAM SINGH, *Maharaja of Jeypoor,* G. C. S. I., *his heirs and successors, executed on the one part by Major* WILLIAM H. BEYNON, *Political Agent at the Court of Jeypoor, under authority from Lieutenant-Colonel* RICHARD HARTE KEATINGE, C. S. I. *and* V. C., *Agent to the Governor General for the States of Rajpootana, in virtue of the full powers vested in him by His Excellency the Right Hon'ble* RICHARD SOUTHWELL BOURKE, EARL OF MAYO, VISCOUNT MAYO OF MONYCROWER, BARON NAAS OF NAAS, K. P., G. M. S. I., P. C., *&c., &c., Viceroy and Governor General of India, and on the other part by Nawab* MAHOMED FAIZ ALI KHAN, *Bahadoor, in virtue of the full powers conferred on him by Maharaja* RAM SINGH *aforesaid.*

ARTICLE I.

Subject to the conditions contained in the following Agreement, the Government of Jeypoor will lease to the British Government its right of manufacturing and of selling salt within the limits of the territory bordering on the Sambhur Lake, as hereinafter defined in Article IV, and of levying duties on salt produced within such limits.

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ARTICLE II.

This lease shall continue in force until such time as the British Government desires to relinquish it, provided that the British Government shall give notice to the Government of Jeypoor of its intention to terminate the arrangement two full years previous to the date on which it desires the lease to cease.

ARTICLE III.

To enable the British Government to carry on the manufacture and sale of salt at the Sambhur Lake, the Jeypoor Government shall empower the British Government, and all Officers appointed by the British Government for such purposes, to enter and search, in case of suspicion, houses and all other places enclosed or otherwise within the limits hereinafter defined, and to arrest and punish with fine, imprisonment, confiscation of goods, or otherwise, any and all persons detected within such limits in the violation of any of the rules or regulations which may be laid down by the British Government in regard to the manufacture, sale, or removal of salt, or the prevention of unlicensed manufacture or smuggling.

ARTICLE IV.

The strip of territory bordering on the shores of the lake, including the town of Sambhur and twelve other hamlets, and comprehending the whole of the territory now subject to the joint jurisdiction of the States of Jeypoor and Jodhpoor, shall be demarcated, and the whole space enclosed by such line of demarcation, as well as such portions of the lake itself, or of its dry bed, as are now under the said joint jurisdiction shall be held to constitute the limits within which the British Government and its Officers are authorized to exercise the jurisdiction referred to in Article III.

ARTICLE V.

Within the said limits, and so far as such measures may be necessary for the protection or furtherance of the manufacture, sale, or removal of salt, the prevention of smuggling, and the enforcement of the rules laid down in accordance with Article III of this Agreement, the British Government, or the Officers by it empowered, shall be authorized to occupy land for building or other purposes, to construct roads, erect barriers, hedges or buildings, and to remove buildings or other property. If any land paying land revenue to the Government of Jeypoor be occupied under the authority of the British Government for any of the purposes aforesaid, the British Government shall pay to the Government of Jeypoor an annual rent equal to the amount of such revenue. In every case in which anything involving injury to private property shall be done by the British Government or its Officers under this Article, one month's previous notice shall be given to the Government of Jeypoor, and in all such cases proper compensation shall be paid by the British Government on account of such injury. In case of difference between the British Government or its Officers and the owner of such property as to the amount of the compensation, such amount shall be determined by arbitration. The erection of any buildings within the said limits shall not confer on the British Government any proprietary right in the land, which, on the termination of the lease, shall revert to the Government of Jeypoor, with all buildings or materials left thereon by the British Government. No temples or places of religious worship shall be interfered with.

THE SAMBHUR LAKE.

ARTICLE VI.

Under the authority of the Jeypoor Government, the British Government shall constitute a Court, presided over by a competent Officer, who shall usually hold his sittings within the above-mentioned limits, for the trial and punishment, on conviction, of all persons charged with violation of the rules and regulations referred to in Article III, or offences connected therewith; and the British Government is authorized to cause the confinement of any such offenders sentenced to imprisonment, either within the aforesaid limits or within its own territories as may seem to it most fitting.

ARTICLE VII.

From and after the date of the commencement of the lease, the British Government will, from time to time, fix the price at which salt manufactured within the said limits, other than the salt to be delivered under the second clause of this Article, shall be offered for sale. The Jeypoor Government shall be entitled to receive annually at the place of manufacture from the British Government, for the consumption of the Jeypoor State, any quantity of salt which the Jeypoor Government may demand, not exceeding one hundred and seventy-two thousand (172,000) British Indian maunds, paying for the same at the rate of nine (9) annas (British Currency) per maund. The Jeypoor Government will be at liberty to sell such salt at any price that it may fix.

ARTICLE VIII.

Of the stocks of salt owned jointly by the Governments of of Jeypoor and Jodhpoor, and existing within the said limits at the commencement of the lease, the share belonging to the Jeypoor Government, being the half of the stocks above-mentioned, shall be transferred by the said Government to the British Government on the following terms:—In accordance with custom, the Government of Jeypoor will transfer its share in five hundred and ten thousand (510,000) British Indian maunds of salt to the British Government free of cost. The price to be paid for the share of the Jeypoor Government in the remainder of the said stocks shall be reckoned at six and a half annas ($6\frac{1}{2}$) per British Indian maund, and payment shall be made at this rate by the British Government to the Government of Jeypoor, provided that the said payment of six and a half annas per maund to the Government of Jeypoor shall only commence when salt in excess of eight hundred and twenty-five thousand (825,000) British Indian maunds is sold or exported by the British Government in any year, and then only on the share of such excess which belongs to the Government of Jeypoor; and until the aggregate of such yearly excesses amounts to the full quantity of the stock of salt transferred over and above the said five hundred and ten thousand British Indian maunds, the British Government shall not pay the royalty of 20 per cent. on the sale price of such excess, as provided in Article XII. In reckoning the said eight hundred and twenty-five thousand maunds, the amount of salt reserved for the consumption of the Jeypoor State under Clause 2 of Article VII shall be included.

ARTICLE IX.

No tax, toll, transit duty, or due of any kind whatsoever, shall be levied by the Jeypoor Government, or shall by it be permitted to be levied by any other person, on any salt manufactured or sold by the British Government within the said limits,

or while in transit through the Jeypoor territory and covered by a British Pass *en route* to any place outside the Jeypoor territory, provided that on all salt delivered under Article VII, or sold for consumption within the territory of Jeypoor, the Government of that State will be at liberty to levy whatever tax it may please.

ARTICLE X.

Nothing in this Agreement shall be held to bar the sovereign jurisdiction of the Jeypoor Government, within the aforesaid limits, in all matters, civil and criminal, not connected with the manufacture, sale or removal of salt, or the prevention of unlicensed manufacture or smuggling.

ARTICLE XI.

The Government of Jeypoor shall be relieved of all expenses whatsoever connected with the manufacture, sale, and removal of salt, and the prevention of unlicensed manufacture or smuggling within the limits aforesaid; and in consideration of the lease granted to it, the British Government agrees to pay to the Jeypoor Government, in two half-yearly instalments, an annual rent of one hundred and twenty-five thousand (125,000) Rupees, British Currency, on account of the share of the Jeypoor Government in the salt sold within the said limits, and one hundred and fifty thousand (150,000) Rupees, British Currency, in compensation for duties on salt now levied by the Jeypoor Government, and surrendered under the present Agreement; and the total sum of such annual rent, amounting to two hundred and seventy-five thousand (275,000) Rupees, British Currency, shall be paid without reference to the quantity of salt actually sold in, or exported from, the said limits.

ARTICLE XII.

If the amount of salt sold in, or exported from, the said limits by the British Government in any year shall exceed eight hundred and twenty-five thousand (825,000) British Indian maunds, the British Government shall pay to the Government of Jeypoor on all such excess (subsequent to the exhaustion of the stock referred to in Article VIII) a royalty at the rate of 20 per cent. on the price per maund which shall have been fixed as the selling price under the first clause of Article VII. In the event of any doubts arising as to the amount of salt on which royalty is claimable in any year, the accounts rendered by the principal British Officer in charge at Sambhur shall be deemed conclusive evidence of the amounts actually sold or exported by the British Government within the periods to which they refer, provided that the Jeypoor Government shall not be debarred from deputing one of its own Officers to keep a record of sales for its own satisfaction.

ARTICLE XIII.

The British Government agrees to deliver annually (7,000) seven thousand British Indian maunds of good salt, free of all charges, for the use of the Jeypoor Durbar; such salt to be delivered at the place of manufacture to any Officer empowered by the Jeypoor Government to receive it.

ARTICLE XIV.

The British Government shall have no claim on the land or other revenue, unconnected with salt, payable from the town of Sambhur, or other villages or lands included within the limits aforesaid.

THE SAMBHUR LAKE.

ARTICLE XV.

The British Government shall not sell any salt outside the limits aforesaid within the Jeypoor territory.

ARTICLE XVI.

If any person employed by the British Government, within the said limits, shall have absconded after committing an offence, or if any person shall have absconded after committing a breach of the rules laid down under Article III, the Jeypoor Government shall, on sufficient evidence of his criminality, make every effort to cause his arrest and surrender to the British authorities within the said limits, in case of his passing through, or taking refuge in, any part of the Jeypoor territories.

ARTICLE XVII.

None of the conditions of this Agreement shall have effect until the British Government shall actually assume charge of the manufacture of salt within the said limits. The British Government may determine the date of so assuming charge, provided that such date shall be one of the dates following, *viz.*, the 1st November 1869, the 1st May or the 1st November 1870, or the 1st May 1871. If such charge be not assumed on or before the 1st May 1871, the conditions of this Agreement shall be null and void.

ARTICLE XVIII.

None of the conditions contained in this Agreement shall be in any way set aside or modified without the previous consent of both Governments, and should either party fail or neglect to adhere to these conditions, the other party shall cease to be bound by this Agreement.

(Signed) W. H. BEYNON,
Political Agent.

(Signed) NAWAB MAHOMED FAIZ ALI KHAN BAHADOOR.

Signed, Sealed and Exchanged at Simla, on the seventh day of August, in the year of our Lord one thousand eight hundred and sixty-nine.

(Signed) S. RAM SINGH.

„ MAYO.

This Treaty was ratified by His Excellency the Viceroy and Governor General of India, at Simla, on the seventh of August 1869.

(Signed) W. S. SETON-KARR,
Secy. to the Govt. of India, Foreign Dept.

THE SAMBHUR LAKE.

Treaty between the British Government and the Maharaja of Jodhpoor regarding the lease of the joint property in salt on the Sambhur Lake.

Treaty between the British Government and His Highness Maharaja TUKHT SINGH, G. C. S. I., *of Jodhpoor, his heirs and successors, executed on the one part by Colonel* JOHN C. BROOKE, *Officiating Political Agent at the Court of Jodhpoor, under authority from Lieutenant-Colonel* RICHARD HARTE KEATINGE, C. S. I. *and* V. C., *Agent to the Governor General for the States of Rajpootana, in virtue of the full powers vested in him by His Excellency the Right Hon'ble* RICHARD SOUTHWELL BOURKE, EARL OF MAYO, VISCOUNT MAYO OF MONYCROWER, BARON NAAS OF NAAS, K. P., G. M. S. I., P. C., *&c., &c., Viceroy and Governor General of Inda, and on the other part by* JOSHEE HUNSRAJ, *Moosahib of Marwar, in virtue of the full powers conferred on him by Maharaja* TUKHT SINGH *aforesaid.*

ARTICLE I.

Subject to the conditions contained in the following Agreement, the Government of Jodhpoor will lease to the British Government its right of manufacturing and of selling salt within the limits of the territory bordering on the Sambhur Lake, as hereinafter defined in Article IV, and of levying duties on salt produced within such limits.

ARTICLE II.

This lease shall continue in force until such time as the British Government desires to relinquish it, provided that the British Government shall give notice to the Government of Jodhpoor of its intention to terminate the arrangement two full years previous to the date on which it desires the lease to cease.

ARTICLE III.

To enable the British Government to carry on the manufacture and sale of salt at the Sambhur Lake, the Jodhpoor Government shall empower the British Government, and all Officers appointed by the British Government for such purposes, to enter and search, in case of suspicion, houses and all other places enclosed or otherwise, within the limits hereafter defined, and to arrest and punish with fine, imprisonment, confiscation of goods or otherwise, any and all persons detected within such limits in the violation of any of the rules or regulations which may be laid down by the British Government in regard to the manufacture, sale, or removal of salt, or the prevention of unlicensed manufacture or smuggling.

ARTICLE IV.

The strip of territory bordering on the lake, including the town of Sambhur and twelve other hamlets, and comprehending the whole of the territory now subject to the joint jurisdiction of the States of Jodhpoor and Jeypoor, shall be demarcated, and the whole space enclosed by such line of demarcation, as well as such portions of the lake itself, or of its dry bed, as are now under the said joint jurisdiction, shall be held to constitute the limits within which the British Government and its Officers are authorized to exercise the jurisdiction referred to in Article III.

ARTICLE V.

Within the said limits, and so far as such measures may be necessary for the protection or furtherance of the manufacture, sale, or removal of salt, the prevention of smuggling, and the enforcement of the rules laid down in accordance with Article III of this Agreement, the British Government, or the Officers by

it empowered, shall be authorized to occupy land for building or other purposes, to construct roads, erect barriers, hedges, or buildings, and to remove buildings or other property. If any land paying land revenue to the Government of Jodhpoor be occupied under the authority of the British Government for any of the purposes aforesaid, the British Government shall pay to the Government of Jodhpoor an annual rent equal to the amount of such revenue. In every case in which anything involving injury to private property shall be done by the British Government or its Officers under this Article, one month's previous notice shall be given to the Government of Jodhpoor, and in all such cases proper compensation shall be paid by the British Government on account of such injury. In case of difference between the British Government or its Officers and the owner of such property as to the amount of the compensation. such amount shall be determined by arbitration. The erection of any buildings within the said limits shall not confer on the British Government any proprietary right in the land, which, on the termination of the lease, shall revert to the Government of Jodhpoor, with all buildings or materials left thereon by the British Government. No temples or places of religious worship shall be interfered with.

Article VI.

Under the authority of the Jodhpoor Government, the British Government shall constitute a Court, presided over by a competent Officer, who shall usually hold his sittings within the above-mentioned limits, for the trial and punishment, on conviction, of all persons charged with violations of the rules and regulations referred to in Article III, or offences connected therewith; and the British Government is authorized to cause the confinement of any such offenders sentenced to imprisonment, either within the aforesaid limits or within its own territories, as may seem to it most fitting.

Article VII.

From and after the date of the commencement of the lease, the British Government will, from time to time, fix the price at which salt manufactured within the said limits, and intended for exportation beyond the limits of the Jodhpoor and Jeypoor States. shall be offered for sale.

Article VIII.

Of the stocks of salt owned jointly by the Governments of Jodhpoor and Jeypoor, and existing within the said limits at the commencement of the lease, the share belonging to the Jodhpoor Government, being the half of the stocks above-mentioned, shall be transferred by the said Government to the British Government on the following terms:—The Jodhpoor Government will transfer its share in five hundred and ten thousand (510,000) British Indian maunds of salt to the British Government free of cost. The price to be paid for the share of the Jodhpoor Government in the remainder of the said stocks shall be reckoned at six and a half annas ($6\frac{1}{2}$) per British Indian maund, and payment shall be made at this rate by the British Government to the Government of Jodhpoor, provided that the said payment of six and a half annas per maund to

the Government of Jodhpoor shall only commence when salt in excess of eight hundred and twenty-five thousand (825,000) British Indian maunds is sold or exported by the British Government in any year, and then only on the share of such excess which belongs to the Government of Jodhpoor; and until the aggregate of such yearly excesses amounts to the full quantity of the stocks of salt transferred over and above the said five hundred and ten thousand (510,000) British Indian maunds, the British Government shall not pay the royalty of 20 per cent. on the sale price of such excess, as provided in Article XII.

ARTICLE IX.

No tax, toll, transit duty, or due of any kind whatsoever, shall be levied by the Jodhpoor Government, or shall by it be permitted to be levied by any other person, on any salt manufactured or sold by the British Government within the said limits, or while in transit through the Jodhpoor territory, and covered by a British pass, *en route* to any place outside the Jodhpoor territory.

ARTICLE X.

Nothing in this Agreement shall be held to bar the sovereign jurisdiction of the Jodhpoor Government, within the aforesaid limits, in all matters, civil and criminal, not connected with the manufacture, sale, or removal of salt, or the prevention of unlicensed manufacture or smuggling.

ARTICLE XI.

The Government of Jodhpoor shall be relieved of all expenses whatsoever connected with the manufacture, sale, and removal of salt, and the prevention of unlicensed manufacture or smuggling within the limits aforesaid; and in consideration of the lease granted to it, the British Government agrees to pay to the Jodhpoor Government, in two half-yearly instalments, an annual rent of one hundred and twenty-five thousand (125,000) Rupees, British Currency, on account of the share of the Jodhpoor Government in the salt sold within the said limits, and the total sum of such annual rent, amounting to one hundred and twenty-five thousand (125,000) Rupees, British Currency, shall be paid without reference to the quantity of salt actually sold in, or exported from, the said limits.

ARTICLE XII.

If the amount of salt sold in, or exported from, the said limits by the British Government in any year shall exceed eight hundred and twenty-five thousand (825,000) British Indian maunds, the British Government shall pay to the Government of Jodhpoor on all such excess (subsequent to the exhaustion of the stock referred to in Article VIII) a royalty at the rate of 20 per cent. on the price per maund, which shall have been fixed as the selling price under the first clause of Article VII. In the event of any doubts arising as to the amount of salt on which royalty is claimable in any year, the accounts rendered by the principal British Officer in charge at Sambhur shall be deemed conclusive evidence of the amounts actually sold or exported by the British Government within the periods to which they refer; provided that the Jodhpoor Government shall not be debarred from deputing one of its own Officers to keep a record of sales for its own satisfaction.

THE SAMBHUR LAKE.

ARTICLE XIII.

The British Government agrees to deliver annually seven thousand (7,000) British Indian maunds of good salt, free of all charges, for the use of the Jodhpoor Durbar; such salt to be delivered at the place of manufacture to any Officer empowered by the Jodhpoor Government to receive it.

ARTICLE XIV.

The British Government shall have no claim on the land or other revenue, unconnected with salt, payable from the town of Sambhur or other villages or lands included within the limits aforesaid.

ARTICLE XV.

The British Government shall not sell any salt within the Jodhpoor territory outside the limits of such jurisdiction as may be assigned to it by this or any other agreement.

ARTICLE XVI.

If any person employed by the British Government within the said limits shall have absconded after committing an offence, or if any person shall have absconded after committing a breach of the rules laid down under Article III, the Jodhpoor Government shall, on sufficient evidence of his criminality, make every effort to cause his arrest and surrender to the British authorities within the said limits, in case of his passing through, or taking refuge in, any part of the Jodhpoor territories.

ARTICLE XVII.

None of the conditions of this Agreement shall have effect until the British Government shall actually assume charge of the manufacture of salt within the said limits. The British Government may determine the date of so assuming charge, provided that if such charge be not assumed on or before the 1st May 1871, the conditions of this Agreement shall be null and void.

ARTICLE XVIII.

None of the conditions contained in this Agreement shall be in any way set aside or modified without the previous consent of both Governments, and should either party fail or neglect to adhere to these conditions, the other party shall cease to be bound by this Agreement.

Signed, Sealed, and Exchanged at Jodhpoor this twenty-seventh day of January A. D. eighteen hundred and seventy, corresponding to the eleventh day of Maha Bud Sumvut nineteen hundred and twenty-six.

J. C. BROOKE, *Colonel,*
Offg. Political Agent, Marwar.

(Sd.) JOSHEE HUNSRAJ. (Sd.) MAYO.

This Treaty was ratified by His Excellency the Viceroy and Governor General of India, at Fort William, on the fifteenth of February 1870.

(Sd.) C. U. AITCHISON,
Offg. Secy. to the Govt. of India.

THE SAMBHUR LAKE.

Treaty between the British Government and the Maharaja of Jodhpoor regarding the lease of the joint property in salt on the Sambhur Lake.

Treaty between the British Government and His Highness TUKHT SINGH, G. C. S. I., *Maharaja of Jodhpoor, his heirs and successors, executed on the one part by Colonel* JOHN CHEAP BROOKE, *Officiating Political Agent at the Court of Jodhpoor, under authority from Lieutenant-Colonel* RICHARD HARTE KEATINGE, C. S. I. *and* V. C., *Agent to the Governor General for the States of Rajpootana, in virtue of the full powers vested in him by His Excellency the Right Hon'ble* RICHARD SOUTHWELL BOURKE, EARL OF MAYO, VISCOUNT MAYO OF MONYCROWER, BARON NAAS OF NAAS, K. P., G. M. S. I., P. C., *&c., &c., Viceroy and Governor General of India, and on the other part by* JOSHEE HUNSRAJ, *Moosahib of Marwar, in virtue of the full powers conferred on him by Maharaja* TUKHT SINGH *aforesaid.*

ARTICLE I.

Subject to the conditions contained in the following Agreement, the Government of Jodhpoor will lease to the British Government its right of manufacturing and of selling salt within the limits of the territory bordering on the Sambhur Lake, as hereinafter defined in Article IV, and of levying duties on salt produced within such limits.

ARTICLE II.

This lease shall continue in force until such time as the British Government desires to relinquish it, provided that the British Government shall give notice to the Government of Jodhpoor of its intention to terminate the arrangement two full years previous to the date on which it desires the lease to cease.

ARTICLE III.

To enable the British Government to carry on the manufacture and sale of salt at the Sambhur Lake, the Jodhpoor Government shall empower the British Government, and all Officers appointed by the British Government for such purposes, to enter and search, in case of suspicion, houses and all other places enclosed or otherwise, within the limits hereafter defined, and to arrest and punish with fine, imprisonment, confiscation of goods or otherwise, any and all persons detected within such limits in the violation of any of the rules or regulations which may be laid down by the British Government in regard to the manufacture, sale, or removal of salt, or the prevention of unlicensed manufacture or smuggling.

ARTICLE IV.

A strip of territory, bordering the shores of the lake throughout within the separate jurisdiction of Jodhpoor, including Nawa, Goodha, and other villages and hamlets, and averaging two (2) miles in width, measured from the high water limits of the lake, shall be demarcated, and the whole space enclosed by such line of demarcation, as well as such portions of the lake itself, or of its dry bed, as are now under the exclusive and separate jurisdiction of Jodhpore, shall be held to constitute the limits within which the British Government and its Officers are authorized to exercise the jurisdiction referred to in Article III.

ARTICLE V.

Within the said limits, and so far as such measures may be necessary for the protection or furtherance of the manufacture, sale, or removal of salt, the prevention of smuggling, and the enforcement of the rules laid down in accordance with Article

III of this Agreement, the British Government, or the Officers by it empowered, shall be authorized to occupy land for building or other purposes, to construct roads, erect barriers, hedges, or buildings, and to remove buildings or other property.

If any land paying land revenue to the Government of Jodhpoor be occupied under the authority of the British Government for any of the purposes aforesaid, the British Government shall pay to the Government of Jodhpoor an annual rent equal to the amount of such revenue. In every case in which anything involving injury to private property shall be done by the British Government or its Officers under this Article, one month's previous notice shall be given to the Government of Jodhpoor, and in all such cases proper compensation shall be paid by the British Government on account of such injury. In case of difference between the British Government or its Officers and the owner of such property as to the amount of the compensation, such amount shall be determined by arbitration. The erection of any buildings within the said limits shall not confer on the British Government any proprietary right in the land, which, on the termination of the lease, shall revert to the Government of Jodhpoor, with all buildings or materials left thereon by the British Government. No temples or places of religious worship shall be interfered with.

ARTICLE VI.

Under the authority of the Jodhpoor Government, the British Government shall constitute a Court, presided over by a competent Officer, for the trial and punishment, on conviction, of all persons charged with violations of the rules and regulations referred to in Article III, or offences connected therewith; and the British Government is authorized to cause the confinement of any such offenders sentenced to imprisonment, within the aforesaid limits or elsewhere, as may seem to it most fitting.

ARTICLE VII.

From and after the date of the commencement of the lease, the British Government will, from time to time, fix the price at which salt manufactured within the said limits shall be offered for sale.

ARTICLE VIII.

The whole of the stocks of salt existing within the aforesaid limits, at the commencement of the lease, shall be transferred by the Jodhpoor Government to the British Government on the following terms:—The Government of Jodhpoor will transfer six hundred thousand (600,000) British Indian maunds of salt to the British Government, as stock with which to commence operations free of cost. The price to be paid to the Jodhpoor Government for the remainder of the said stock shall be reckoned at six and a half annas ($6\frac{1}{2}$) per British Indian maund, and payment shall be made at this rate by the British Government to the Government of Jodhpoor; provided that the said payment of six and a half annas ($6\frac{1}{2}$) per maund to the Government of Jodhpoor shall only commence when salt in excess of nine hundred thousand (900,000) British Indian maunds is sold or exported by the British Government in any year, and until the aggregate of such yearly excess amounts to the full quantity of the stock of salt transferred, over and above the said six hundred thousand (600,000) British maunds, the British Government shall not pay the royalty of forty (40) per cent. on the sale price of such excess as provided in Article XII.

THE SAMBHUR LAKE.

ARTICLE IX.

No tax, toll, transit duty, or due of any kind whatsoever, shall be levied by the Jodhpoor Government, or shall by it be permitted to be levied by any other person, on any salt manufactured or sold by the British Government within the said limits, or while in transit through the Jodhpoor territory, and covered by a British pass *en route* to any place outside the Jodhpoor territory; provided that on all salt sold for consumption within the territory of Jodhpoor, the Government of that State will be at liberty to levy whatever tax it may please.

ARTICLE X.

Nothing in this Agreement shall be held to bar the sovereign jurisdiction of the Jodhpoor Government within the aforesaid limits in all matters, civil and criminal, not connected with the manufacture, sale, or removal of salt, or the prevention of unlicensed manufacture or smuggling.

ARTICLE XI.

The Government of Jodhpoor shall be relieved of all expenses whatsoever connected with the manufacture, sale, and removal of salt, and the prevention of unlicensed manufacture or smuggling within the limits aforesaid, and in consideration of the lease and other immunities hereby granted to it, the British Government agrees to pay to the Jodhpoor Government, in two half-yearly instalments, an annual rent of three lakhs (3,00,000) of Rupees, British currency, and the total sum of such annual rent, amounting to three lakhs (3,00,000) of Rupees, British currency, shall be paid without reference to the quantity of salt actually sold in, or exported from, the said limits. The above sum of three lakhs (3,00,000) of Rupees shall include all rights of bhoom, transit dues, and hukks of every kind due to the Thakoor of Koochawun and others which the Jodhpoor Government agrees to satisfy.

ARTICLE XII.

If the amount of salt sold in, or exported from, the said limits by the British Government in any year shall exceed nine hundred thousand (900,000) British Indian maunds, the British Government shall pay to the Government of Jodhpoor on all such excess (subsequent to the exhaustion of the stock referred to in Article VIII) a royalty at the rate of forty (40) per cent. on the price per maund, which shall have been fixed as the selling price under Article VII. In the event of any doubts arising as to the amount of salt on which royalty is claimable in any year, the accounts rendered by the principal British Officer in charge at Sambhur shall be deemed conclusive evidence of the amounts actually sold or exported by the British Government within the periods to which they refer, provided that the Jodhpoor Government shall not be debarred from deputing one of its own Officers to keep a record of sales for its own satisfaction.

ARTICLE XIII.

The British Government agrees to deliver annually seven thousand (7,000) British Indian maunds of good salt, free of all charges, for the use of the Jodhpoor Durbar; such salt to be delivered at the place of manufacture to any Officer empowered by the Jodhpoor Government to receive it.

THE SAMBHUR LAKE.

ARTICLE XIV.

The British Government shall have no claim on the land or other revenue, unconnected with salt, payable from the townships of Nawa, Goodha, or other villages or lands included within the limits aforesaid.

ARTICLE XV.

The British Government shall not sell any salt within the Jodhpoor territory outside the limits of such jurisdiction as may be assigned to it by this or any other Agreement.

ARTICLE XVI.

If any person employed by the British Government within the said limits shall have absconded after committing an offence, or if any person shall have absconded after committing a breach of the rules laid down under Article III, the Jodhpoor Government shall, on sufficient evidence of his criminality, make every effort to cause his arrest and surrender to the British authorities within the said limits, in case of his passing through, or taking refuge in, any part of the Jodhpoor territories.

ARTICLE XVII.

None of the conditions of this Agreement shall have effect until the British Government shall actually assume charge of the manufacture of salt within the said limits. The British Government may determine the date of so assuming charge, provided that if such charge be not assumed on or before the 1st May 1871, the conditions of this Agreement shall be null and void.

ARTICLE XVIII.

None of the conditions contained in this Agreement shall in any way be set aside or modified without the previous consent of both Governments; and should either party fail or neglect to adhere to these conditions, the other party shall cease to be bound by this Agreement.

Signed at Jodhpoor on the eighteenth day of April A. D. one thousand eight hundred and seventy.

Seal.

(Sd.) J. C. BROOKE, *Colonel,*
Offg. Political Agent.

Seal of State of Jodhpoor.

(Sd.) JOSHEE HUNSRAJ. Seal.

(Sd.) MAYO. Seal.

This Treaty was ratified by His Excellency the Viceroy and Governor General of India, at Simla, on the 26th July 1870.

(Sd.) C. U. AITCHISON,
Offg. Secy. to the Govt. of India, Foreign Dept.

THE SAMBHUR LAKE.

NOTIFICATION—By the Foreign Department,—dated, Fort William, the 18th March 1870.

No. 505*P.*—In supersession of Notification No. 300P, dated 17th February, regarding the Sambhur Lake Court, the following revised Notification is published for general information :—

Whereas by a Treaty, dated the 7th day of August 1869, and made between the British Government and His Highness the Maharaja of Jeypoor, and by a Treaty, dated the 22nd day of November 1869, and made between the British Government and His Highness the Maharaja of Jodhpoor, to enable the British Government to carry on the manufacture and sale of salt at the Sambhur Lake, it was (amongst other things) agreed that the Governments of Jeypoor and Jodhpoor should empower the British Government and all Officers appointed by the British Government in this behalf to enter and search, in case of suspicion, houses and all other places, enclosed or otherwise, within the limits hereinafter defined, and to arrest and punish with fine, imprisonment, confiscation of goods, or otherwise, all persons detected within such limits in the violation of any of the rules which may be laid down by the British Government in regard to the manufacture, sale, or removal of salt, or the prevention of unlicensed manufacture or smuggling; and that under the authority of the said Governments of Jeypoor and Jodhpoor, the British Government should constitute a Court presided over by a competent Officer, who should usually hold his sittings within the above-mentioned limits, for the trial and punishment, on conviction, of all persons charged with violations of the said rules and regulations, or with offences connected therewith; and the British Government was also authorized to cause the confinement of any such offenders sentenced to imprisonment either within the aforesaid limits or within its own territories, as might seem to it most fitting:

In pursuance of the provisions hereinbefore cited, and under the authority aforesaid, the Viceroy and Governor General of India in Council hereby declares—

1*stly*.—A Court to be called the "Sambhur Lake Court" is hereby established.

2*ndly*.—The local limits of the jurisdiction of such Court shall be the strip of territory bordering on the shores of the Sambhur Lake, including the town of Sambhur and twelve other hamlets, and comprising the whole of the territory now subject to the joint jurisdiction of the States of Jeypoor and Jodhpoor, and which shall be demarcated under the said Treaties.

3*rdly*.—The Assistant Commissioner for the time being in charge of the British Inland Customs Department at the Sambhur Lake shall be the Judge of such Court. He shall have the powers of a Subordinate Magistrate of the 1st Class, as described in Section 22 of the Code of Criminal Procedure, and he shall have, according to such powers, jurisdiction (A) in respect of the offences described in Section 21 of the said Code when committed by subjects of Her Majesty within the aforesaid limits, and (B) in respect of breaches of the rules described in Article III of the said Treaties or offences connected therewith, when committed by any person whatsoever within the aforesaid limits.

THE SAMBHUR LAKE.

4thly.—In the investigation and trial of such offences and breaches of rules, and in the levy of fines therefor, he shall be guided by the provisions of the Code of Criminal Procedure.

5thly.—In all cases in which salt shall be manufactured, carried, or stored within the said limits in contravention of the rules for the time being in force for the regulation of such manufacture, carriage, or storage, the said Court is empowered, in addition to any other penalty which it is authorized to inflict, to declare the said salt confiscated, and dispose of it according to the rules for the time being in force in the Department of Indian Customs.

6thly.—For the purpose of trying offences described in Section 21 of the Criminal Procedure Code, when committed by subjects of Her Majesty within the limits of the jurisdiction of the Sambhur Lake Court, the aforesaid limits shall be deemed to be a division of a district subordinate to the Deputy Commissioner of Ajmere, and any subject of Her Majesty convicted on a trial held by the Sambhur Lake Court of any of the offences described in Section 21 of the Code of Criminal Procedure, may appeal to the Deputy Commissioner of Ajmere, who shall in the disposal of such appeals be guided by the said Code.

7thly.—Any person convicted on a trial held by the Sambhur Lake Court of a breach of the rules described in Article III of the said Treaties, or offences connected therewith, and any person aggrieved by proceedings held under these rules, may petition the Agent to the Governor General for the States of Rajpootana, who, if he see fit, may send for the record of the case, and may confirm, reverse, or modify the sentence, or pass any other orders not inconsistent with the rules.

C. U. AITCHISON,
Offg. Secy. to the Govt. of India.

Appendix C.

Oudh and Jounpore Local Salt Works.

MALLOWNA SALT WORKS.

Site of works.

1. The newly-established salt works, known by the above name, are situated in Pergunnah Behar, of the Oonao District, on lands belonging to the villages detailed below,* covering a space of about $1\frac{1}{4}$ square miles.

How enclosed.

2. They are surrounded by a boundary wall from eight to ten feet in height, and about six miles in circuit, constructed at the expense of Government. On its northern, eastern, and western faces, this wall is fairly regular in outline; but, owing to the configuration of the ground where the bank of the river Lonee is skirted, its southern face prevents a less regular appearance. At worst, however, its configuration lends itself to easy supervision by preventive posts, placed at such distances as not to entail a very heavy expenditure on the force by which these latter are manned.

Villages enclosed.

3. Within this wall are enclosed the villages named at foot,† inhabited principally by Nooneeahs and Lodhs, and containing altogether 306 houses. Of these 306, the occupants of 30 have been ousted as in nowise connected with manufacture of salt, receiving through the district authorities compensation in proportion to their individual claims; while the remaining 276, under relaxations of the original departmental scheme, which have appeared at the outset imperative, are occupied by people for the most part directly (as owners of, or laborers in, works), but in a few minor instances indirectly (as village servants, *i. e.*, priests, artizans,‡ &c., by the services rendered to the actual workers) connected with the processes carried on within the walls.

Ousting of occupants.

Persons allowed to remain.

Villages skirting the wall.

4. Immediately outside the enclosure lie the villages or hamlets of Pursurra, west; Jewrakhun Khera, north-west; Nibiya, north; Mullowna, north-east; Bulsingh Khera, east; Bhugwantpoor, east; Jeeakhera, east by south; and Pooreye, south-east, Doomuneekhera, south-west.

Gates and wickets.

5. For purposes of entrance and exit, there are three large gates, *viz.*, one on the western face near Pursurra, one on the northern near Nibiya, and a third on the eastern side near Bulsingh Khera. §Of the three wickets, one is on the western face, at a short distance south of the main gate; one on the northern side, west of the main gate, and the third is near the south-eastern angle of the enclosure not far from the village of Jeeakhera, and constitutes the solitary outlet along the whole southern face of the wall. These wickets, which have strong doors and locks,

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* Pursurra, Poorundoorpoor, Malowna, Bhugwuntpoor, Poorai, and Dainta.

† Shahibgunge, Maharajpoor, Dainta, Beaspoor, Busunt Khera, Dewan Khera, Moodoo Khera, Chupkaha, Purwapoor, Goolurreea, Narrainpoor, Oonchwa.

‡ Blacksmiths, carpenters, chumars, barbers, &c.

§ All three gates serve for entrance of work-people, carts, pack-animals, or porters, laden or unladen, but exit by the northern gate is barred to all laden carriage, which must be taken out, under escort, by the western or eastern gates, whether the load be salt or merely farm produce; exit of unladen carts, animals, porters, and of work-people is permitted at all gates, and throughout the hours of the day. The gates open at day-light, and close at dark. A guard is stationed at each, consisting of one emadar and four men.

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and at each of which a guard is maintained, have their separate uses. Thus, the first above-named, *i e.*, near the western gate, is intended solely for the private use of the officer in charge, in view to himself or his most trusted subordinates being at any time able to pass unnoticed out of the enclosure. It is closed to the public. The remaining two wickets, opened between stated hours, serve for passage to and fro of people engaged on the works and of their cattle. Each is rigorously closed during the night, and all keys, whether of gates or wickets, are deposited with the Patrol.*

Mistake in construction of wall.

6. Before quitting the subject of the wall,† it must needs be noted that a radical error of construction has occurred in raising the superstructure on the very edge of the ditch dug for extraction of material. This has already led to the collapse of considerable sections, and will, it is much to be feared, aid in bringing down more, should heavy rain be frequent. There is a set of drainage water against the north-eastern wall, which has already done much damage, and against which strenuous efforts, in the way of inducing the water to take to a natural outlet by a nullah which runs in a south-westerly direction from the Bulsing Khera Gate through the centre of the enclosure and falls into the Lonee, are now being directed.

External preventive posts.

7. Preventive posts of four men, with a jemadar to every two posts, are placed outside the wall, and a raised *maichan* between each post affords a perfect view over the interior of the works, &c.

Interior area: its sub-division into clusters of works.

8. The area so enclosed is roughly divided into clusters of works locally termed "Dowana." There are twelve of these, the names of which follow in the order, according to common report, of the quality of the salt produced in each:—

Order of clusters in respect to quality of produce.

1.—Kurumtulleea.‡	7.—Nareepar.
2.—Sahibgunge.	8.—Chupkaha.
3.—Puchbheeta.	9.—Goolurrea.
4.—Bhooreehar.	10.—Narrainpoor.
5.—Jeeakhera.	11.—Oonchwa.
6.—Beeaspoor.	12.—Purwapoor.§

Number of works.

9. These twelve Dowanas, up to the 30th of June 1870, contained 284 works, on which were 343 wells, 403 *patas*, or evaporation pans, 1,343 filters, the whole providing employment for 3,364 people and 721 cattle.

Area occupied and available.

10. About one-third of the available area is already occupied, leaving two-thirds available for extensions and additions of factories.—(*Vide* Annexure A).

Castes employed.

11. The owners of these works are mostly Looneeahs (or Nooneeahs) and Lodhs in nearly equal numbers. A few Rajpoots, a still smaller number of Brahmins and Kayaths, with here and there an Aheer or a Koomar, have shared in the venture.

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* It may be remarked that no provision exists in the departmental rules for more than one gate, or for any wickets, but the Assistant Commissioner explains that modifications were forced upon him by circumstances. The question, how far our rules as first devised could have been applied in their rigor, will be taken up as this Note proceeds.

† It must not be overlooked that the obligatory building of this wall in the hot weather was unfavorable to durability.

‡ Mr. Hay thinks Sahibgunge entitled to precedence, but the popular voice places Kurumtulleea at the head of the list.

§ Nos. 1, 2, 3, 4, 6, 7 are worked by Lodhs only. Nos. 8, 9, 10 and 12 by Nooneeahs only. No. 5, by Nooneeahs and Lodhs. No. 11 by divers castes in which Nooneeahs predominate.—(Mr. Hay.)

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Process by which salt is made

12. The process by which salt is made is known as the "Seenchan," or irrigation method, and may, in its principal features, be described in very few words. Brine is drawn from wells dug for the purpose, is then liberally sprinkled mostly on mounds of earth, also raised by turning out the contents of filters.—(Mr. Hay). After the lapse of a period which varies with the season,* the surface of these mounds is scraped off and transferred to rude filters, in which it is lixiviated with fresh brine, the filtrate being then exposed in shallow pans of masonry to solar heat until salt forms. It is unnecessary to enter into minor details, all such being already recorded. The result of the first sprinkling of brine, which, at first sight, looks so like a waste of labor, is shown by analysis to be retention by the soil of the considerable proportion of sulphates which the first crude brine contains,† and which is found to be very materially less in the secondary solution obtained by filtration. The *rationale* of this would seem to be that the sprinkling and its consequences constitute, in fact, an evaporation at a low temperature, during which the relative solubilities of the substances implicated being brought into action, the less soluble are first deposited in more or less solid form, while the more highly soluble particles are retained in suspension by the moisture still lingering in the heated soil.

Brief sketch.

Wells how dug.

13. Wells are dug under conditions which deserve special notice. The first thing which strikes a new comer is the curious fashion in which the wells are arranged in rows, and so closely packed as irresistibly to suggest the likelihood of subsidence of one into another, which mishap, as a matter of fact, does frequently mar all the first labor of their owners. The risk is well understood, and deliberately incurred, the object being to set up a system of mutual drainage which shall subdivide, and thus lessen to each the flow of sweet water which is always encountered in the upper strata which the shafts have to pierce. It is stated that no single well (by which must, of course, be understood such wells as the means of the classes employed would enable them to dig, or such as the profits of their trade would bear) could be sunk without being so swamped with sweet water as to be useless for salt-making.

Peculiarities.

Kinds of wells.

14. The wells in use are of the kind known as *kucha*, and to prevent, as far as may be, at a cheap rate, cutting of sides and subsidence of the upper strata of lighter soils, they are lined with twisted twigs (this lining being called *beenr*).‡ In the former and their long-established works, a more durable wooden lining (*kutkwâr*) was used in the more southerly clusters,§ where a very sandy soil made them indispensable. The depth required to strike weak brine is about 33 feet, and for stronger brine about 85 feet.

Quality of salt produced.

15. The salt produced is small grained, opaque, but very fairly white and clean. It has enjoyed, under the name of Bainswara salt, a high reputation, and the memory of its excellence

* In favorable weather, a perfectly new mound is said to be ready for scraping on the third day after sprinkling has begun. Each factory has several of these irrigation mounds, and sprinkling and scraping goes on in regular routine, without much reference to relative ripeness of soil.—(Mr. Hay).

† Mr. Hay holds that this impurity of the primary brine is due to comparative shallowness of the wells, and that by sinking shafts to greater depths, a much purer brine would be obtained. If this opinion be sound, by such a reform, unless indeed the cost of sinking and of maintaining the deeper well, were such as to exceed that of the present preliminary watering of the soil, including raising of mounds, &c., it is evident that the existing process would be thereby simplified and cheapened.

‡ A carefully compiled glossary of all Vernacular technicalities has been ordered.

§ Mr. Hay.

(apparently imaginary, for, although superior to our Salumbha, it has not as yet equalled what we can make at Sooltanpore) is still cherished by the people of Oudh. One of the existing clusters, Kurumtulleea, is said to have monopolized the supply of the King's household, and wealthy Native gentlemen of the neighbourhood have asserted to the present writer their preference of the local produce, even to Sambhur, the salt, *par excellence*, of the Native gentry of the north-west.

Management of works.

16. The works are managed on a system closely allied to that of those co-operative trading societies from which large results appear probable in Europe. The workers are divided into two classes,—" Kisan" or " Kâshtkâr," who are the capitalists of the venture, and " Bhutteya" or co-operatives. The Kisan provides all the plant, and, as the season goes on, advances, from time to time, coin or kind for the support of his Bhutteyas—the arrangement being that the produce shall be divided into two equal portions,—one of which shall belong to the former, the other to the latter. It will, of course, frequently happen that the produce is not all sold by the time when the Bhutteyas disperse for their monsoon field operations. This is the Kisan's opportunity: he is at once banker and account-keeper to the association; he knows what he has advanced or chooses to declare himself to have advanced to his partners, and it rests with him to acknowledge as much, or as little, as he chooses of subsequent profits. This is the system, a legacy of the time when salt works were plentiful and prosperous in Oudh, which has now to be exposed to a strain such as it has not before borne, and the effect of which has yet to be tested. Before annexation, and even for some time after the disorders of 1857 and 1858 had subsided, matters were far otherwise than now with Nooneeahs and Lodhs (the principal salt-makers) in Oudh. If not, *de jure*, *adscripti glebae*, they were, by tradition and by contraction of opportunity, strongly tied down to the soil on which they were born. They were " Kumeena," *vilains*, for whom humble avocations, beyond which they must not aspire, were prescribed—their boldest effort at seeking occupation afar was bounded by the temporary migration of a few bands varying in stength up to actually considerable numbers, to dig a tank for some wealthy zemindar, or to assist in opening a new line of road. By the setting in of the rains, most of these would, however, have returned to their villages with an eye to field work. Thus, there was no permanent drain on these classes; no sensible relief to any local surplus of population. The enormous and still increasing drafts on the agricultural resources of the Province resulting from the ever-extending communications of the present time, which are known to be daily adding to the cultivated area, and, as a necessary consequence, to furnish more and more employment for labourers, were unknown in a land where roads were still few and bad: there was little choice of employment, and, more especially to those who stayed at home, the hereditary avocation was the stand-by. Thus, even under pressure of a debt to their capitalist partner. enduring from year to year, there would be little to wonder at if the Bhutteyas were found year by year returning to an occupation which at least fed them for many months. But it is not even certain that their case was always as bad as eternal indebtedness would imply. Local traditions are of course to be received with caution, but these represent the condition of salt-workers, in pre-annexation days, as one of marked prosperity; while by common consent of various informants, personally questioned, the average selling

Master-makers.

Co-operatives or *Bhutteyas*.

The above system now to be exposed to a severe test.

Former condition of salt-making castes.

Former price of locally-made salt.

rate, *viz.*, 24 seers of 99 tolahs, equal, in round numbers, to 28½ of our weight, was higher than what they can now calculate on obtaining. There was no competition, and the producers commanded their own prices. Prices of grain which so largely influence the price of other necessaries, were much lower than now;

Cost of living much less than now.

so that while the salt-maker in all likelihood earned more than he can now, he very certainly spent less. At present the very development of communications which, by drawing away enormous quantities of grain, has, despite all extensions of cultivation, so largely increased the cost of living, brings on its reflux very large supplies of salts, most of them quite equal to, some superior to, any

Influence of imported salts.

thing which can be locally made, and at prices which now tending constantly to decrease,* necessarily lessen the margin for profit on local manufacture, which pays not only the same duty as the imported kinds, but additional cesses which go to neutralize the cost of carriage to the latter. Suppose the maker of the present day to obtain the same price as of old, say, in round numbers, Rs. 1-7† per maund (and no indication is as yet visible that the trade is inclined to pay so much as a rule), his profit would, as a mere matter of figures, be large; but it would by no means be the profit of the pre-annexation time, when, as already noted, quite as much money came into his hands as now and much less went out. This being, it has yet to be seen if the manufacture will attract labor as of yore, now that such multiplied channels are ready to draw off any surplus of population. There is agri-

Recent changes in condition of salt-making classes, openings in agriculture, public works, &c.

culture,‡ congenial and profitable; there are public works of all kinds calling for spade labor, not in any way distasteful to the classes concerned, and also highly remunerative. Contract work of this kind is known to pay largely, and it is matter of gossip in the neighbourhood of these very works that, at such labor, a family can earn from Rs. 1-4 to Rs. 1-8 per diem; and with rumours of this nature afloat, the Bhutteyas who after all are the mainspring of the work (any man may put *money* into the venture, but only certain castes will, to any practical purpose, give their *labor*), may think twice before returning to an occupation, which, in the present instance, has so far barely kept them alive, and has, it may be said with confidence, left them without exception in debt to their Kisan, who is but little likely to have the foresight to appreciate the advantage of making such a burden lie as lightly as possible. These considerations will show what was meant by saying that the Bhutteya system was about to be exposed to a strain hitherto unknown.—(*Vide* also paragraph 41.)

Day labor little used in salt works.

17. Day labor is not in favor with owners of salt works. The Bhutteya, when he can be got, works for his own hand, and grudges not his labor; the day laborer's aim is to make the best of his bargain, *i. e.*, to give as little as he decently can in return for his day's hire.

Mr. Hay's experimental works.

18. The object of this paper being to travel as little as possible over trodden ground, notice of processes has been condensed as much as was consistent with any allusion to them; but it will be advisable to devote some space to description of the experimental works devised by Mr. Hay, and now in an advanced stage of preparation.

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* In Allahabad, Balumbha salt now sells, under a duty fifty per cent. higher than at about the same rates as in 1853.

† Annas 12 and pies 6 has been the average.

‡ There is some slight conflict of opinion as to whether the salt-making classes have taken much to agriculture. Thus, Mr. Capper, a high authority, thinks that they have *not*, but the Chief Commissioner and Financial Commissioner, with every District Officer and landholder to whom I have spoken since I came into Oudh on my present mission, hold that they *have*.

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His objects.

19. Mr. Hay's object has been twofold, *viz.*, to test the cost of production by the common Native process, and to introduce improvements calculated to lessen labor and raise the quality of produce. He has laid out four series of works, the first of which is in all respects but one identical with those set up by the Natives, the exception being that to save expense, he contemplates utilizing his better-constructed evaporation pans for the final reduction of brine, allowing by calculation for their greater capacity. This set may, therefore, be dismissed without further notice.

First set of works.

Second set.

20. In the second set Mr. Hay proposes to work what he terms an improved Native process, or to test the scheme to which he has, without effect, invited attention of present workers. The main feature in this scheme is the leading the brine from the well-head by a considerably lengthened aqueduct, to the sprinkling ground, whereby he looks to obtaining, without material loss of volume, such concentration of the primary brine as shall add largely to the yield from equal spaces of sprinkled ground. In all other particulars he will, in this set also, adhere to the Native method, with the exception noted in the preceding paragraph.*

Third set.

21. In the third set a kind of graduation process is contemplated, which will best be described by beginning at the point furthest from the well-head. Here then Mr. Hay has constructed a vat, fifty feet long by nineteen broad, adjoining one of his evaporation pans. On the side nearest to the pan, and for some distance overlapping each of its angles, the soil has been excavated to a depth of seven feet, and the space filled with a kind of concrete, well rammed, to prevent percolation. The vat itself has been filled to within fourteen inches of its brim with well salinated earth. A raised aqueduct will run from this vat up to the well-head, *but will not be directly connected with the well.* Along this aqueduct is fixed, at intervals of about 20 feet, a line of tall posts, in which, at about 10 feet above the level of the duct, are fixed cross bars destined to support wooden troughs perforated with holes. The uprights, moreover, will serve to prop a line of tatties made of wicker and grass, the bases of which will rest in the duct; well brine being supplied to the troughs, to which a moderate incline will be given, the theory is that the brine, escaping through the holes, will trickle down through the substance of the tatties, which are to be so placed as to catch the prevalent wind, when, by reason of the greatly increased surface of liquid exposed to atmospheric action, a rapid concentration will ensue. Reaching the aqueduct, the brine will flow into the earth vat above described, where it will soak until, in the opinion of the operator, a sufficient degree of concentration is attained, when, by withdrawal of a plug, the brine, roughly filtered through grass at the inlet of the draining channel, will be drawn off into the system of sediment and evaporation pans presently to be described. This is identical in principle so far as the troughs and tatties are concerned, with the process followed in Germany for concentration of weak brines.†

* This plan of conducting the brine over a long channel is challenged by Native makers, who assert that the produce, for equal outlay, diminishes in proportion as the distance from the well-head increases; in other words, that increases of distance implies waste of liquid and waste of power at the well-head. This objection, already raised by Mr. Braddon, is consonant with my own prejudice, but experiment alone can fairly decide a moot point of the kind; and improvement of process being a great *desideratum*, some little venture may be warranted.

† *Vide* Ure's Directionary of Arts, Manufactures and Mines, article *Salt*, page 625 of Volume III. Dr. Warth, our chief analyst, himself a German and familiar with the process, has more than once, even since visiting Mullowna, expressed to me his doubts of the adaptability of the German method to the climate of India.

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Fourth set.

22. The salient feature of the fourth set is a series of three mounds of earth of the following dimensions, *viz.* :—

Variations in length.

	Height, feet.	Length, feet.	Breadth of slope, feet.
No. 1	8½	134	12*
No. 2	12½	136	47
No. 3	19½	244†	37

On its western face each mound is perpendicular, on its eastern each slopes rapidly to the ground. When ready for work, each will have its slope furrowed with parallel longitudinal channels at 18 inches apart from each other. Another series of uprights, supporting wooden troughs, will conduct well brine into the uppermost channel on each slope. As the channel fills, the brine will run over and thereafter, trickling from channel to channel, will be received by an aqueduct at the base, and thence conducted into the sediment and evaporation pans. Mr. Hay's theory, as to the action of these mounds, is two-fold. In the first place, the passage of the brine from channel to channel and over all the surface of the slope is looked to to effect the desired concentration of brine. In the second, Mr. Hay assumes that the exposure which he has given to the perpendicular faces of his mounds, which stand, it may be noted, in very imperfect *echelon*,‡ will induce in the mass magnetic currents, which, decomposing the foreign salts in the former, will, by percolation and subsequent capillary attraction to the surface, add to the yield of salt.§

Evaporation pans, &c.

23. Mr. Hay's evaporation system remains to be described.

24. He has laid down two sediment pans, 50′ × 37′ × 10″, the purpose of which is to allow settlement of all insoluble matter held in suspension. This will unquestionably conduce to cleanliness of produce, for where a layer of sediment underlies the salt, it is impossible to keep the latter free of contamination during withdrawal. Supplementary to these, and drawing from them their supplies of clarified brine, there are three evaporation pans of the following dimensions :—

Nos. 1 and 2, 74′ × 31′ × 14″
No. 3, 16′ × 50′ × 12″

These are sub-divided into sections, and differ from Native pans only by the solidity of their construction, their greater depth, and the superiority of the plaster with which they are faced.

Deep vat.

25. Lastly, there is a deep vat 49 ′ × 24′ × 3′ built of burnt brick, faced with lime cement, in which Mr. Hay proposes to allow a large quantity of concentrated brine to evaporate slowly, in hope of obtaining, with aid of thorn bushes or other artificial supports, a larger grained (as more perfectly crystallized) and a purer salt than can be made in a more shallow area.

Number of filters.

26. In addition to the foregoing, there are 33 filters on the Native model, with their proper number of reservoirs, and large supplies of prepared earth.

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*The first of these slopes is manifestly too short to be of much use, an error of construction admitted by Mr. Hay.

† These variations in length are intended to attract the prevalent wind along the faces of the mounds.

‡ A more perfect echelonment of the walls would have aided the action of the wind. As it is, one wall greatly masks another.

§ Much reliance cannot, it seems to me, be placed on this latter theory. The proportion of foreign chlorides in the soil of these localities is believed to be small, and no magnetic or other action can evolve from a mass an *elementary* substance, such as chlorine, not originally there latent. The prevalent foreign salts seem to be sulphates, but in absence of plenteous chlorides, whence is magnetism or what else to educe supplementary chloride of sodium ?

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27. Well-brine for all these works is supplied by four wells. Mr. Hay proposes to raise water for his two graduation works by means of a drum, arranged so as to work an ascending and descending rope, each carrying a self-emptying water bag, and to drive the drum by means of bullock-power, applied by a long lever to cogged multiplying wheels,* made at the outset of wood only, but which, if successful, he would supplement with iron.

Supply of brine.

Motive power.

28. Troughs, some wood lining for wells, and the drum are on the ground, the cogged wheels remain to be made.

Woodwork now ready.

29. The cost of all these constructions has amounted to Rs. 1,197-12; and looking to the amount of works of all kinds, to the apparent solidity of masonry, and to the fact that Mr. Hay had to employ day labor, for which he had to pay what is here considered the high rate of two annas per diem.† it seems to me that there is very good value on the ground for the money laid out. Whether it would not have been better to have waited until it was certain that the works at large would succeed before spending even this much money on attempts at introduction of improvements, is a question which it is now too late to discuss with profit.

Cost of the works.

30. The method on which it was proposed to work this range of salt lands on behalf of Government, can be described in few words. Free labor, free trade under certain rules, in framing which prevention of fraud and preservation of order in what we were led to believe would be a well thronged area, were the objects mostly aimed at, and payment of all Government dues and cesses, ere the precincts of the enclosure were passed, were, in general terms, the conditions laid down.

Our system for these salt lands.

31. Hitherto these rules, although, in so far as those which did not require force of law were in question, sanctioned by the Chief Commissioner in March last, have not been brought into anything like general use. In the first place, because up to date we have received no printed copies of the code as it may stand after final review by the Chief Commissioner; but, secondly and mainly, because it has been found impolitic to apply them in their stringency at the beginning.‡ It can scarcely be necessary to lengthen this paper by a detail of every rule which has, for the time being, been held in abeyance. Some omissions and innovations will, however, be noticed. Thus the stamped agreement by which each intending worker was to bind himself to certain conditions, has not been demanded—no passes, or workers' tickets, have been issued, clearance of the enclosure at night has not been insisted on, nor the general ousting of all former residents within the intermural space. And among arrangements not contemplated in the code, has been established within a very short distance, of the Patrol's residence, an enclosed "Mundee," or general storage ground,§ in which a series of pits, distinguished

Departmental rules.

Only partially applied.

Notice of some innovations and omission.

The mundee or storeground.

* These Mr. Hay hopes to drive by a single bullock, thus enabling one pair to do at least the work of two.

† It is rather a source of complaint here that Mr. Hay should have been so liberal. Kisans say that his rates made their Bhutteyas discontented. On the other hand, had he not been liberal, he would have got no labor. An anna a day, in some instances one Rupee for fourteen days, is what people here profess to pay for hired labor.

‡ This was foreseen by the Commissioner of Inland Customs, who instructed Mr. Hay to work gradually up to the code.

§ Total area ... ... 17,920 square yards, *i. e.*, 140 × 128.
Deduct ... ... 3,316 „ „ occupied by roads.

14,604 available for storage.

Sixteen square yards allowed for each pit 14,604 ÷ 16 = 912 number of pits for which accommodation is available.

There are 345 pits at present, and space for 567 more available. The pits were dug by the owners of the salt at their own expense.

by initial letters, has been allotted to each Dowana, a number corresponding to that of his account in the registers, being affixed to the pit or pits containing the stock of each separate owner. No salt is allowed to remain on the works except for necessary drainage, during which each heap is stamped to prevent removal. As regards facility of safeguard, all advantage is with the new plan, nor has any complaint against this been preferred to me during my stay of several days. A weak point in the arrangement is that the owner cannot be, at one and the same time, in the mundee to superintend sales, and on his works to look after manufacture.

Storage of salt.

32. Into the pits, marked as described, salt is measured in baskets carrying twenty seers each, contents of which have previously been determined by weighment with Government weights.* In Annexure B. will be found details of the clearance of twelve of these pits, estimated to contain 1,797 maunds 4 seers, but which turned out 1,999 maunds 16 seers, or 11·24 seers per cent. increase. So far then we seem to be working on the safe side.

Applicability of store ground to a system of bonding.

33. This storage ground, which is susceptible of any extension which may be needed, would lend itself perfectly to institution of a system of bonding were the trade seem to be desirous of availing itself of such a privilege. Up to date, however, although the Assistant Commissioner has been authorized to permit the process, no one has cared to avail himself of it.

Commencement of operations.

34. The season's operations began, as regards exposure of brine, about the 20th, and, in respect to *extraction of salt* on the 26th of March, when the first batch of salt, *viz.*, 76 maunds, was produced in the works of Purshun and of Bukhtawur of the Chupkaha Dowana.

First salt made.

Work when closed.

35. Work closed on the 20th of June, by which date all brine fit to work and remaining exposed was gathered into sunken reservoirs and put under cover. The first monsoon rain fell on the 21st of June. A trifling quantity of salt has since been made by exposing reserved brine during breaks in the weather. The number of days during which the manufacture of salt was carried on was thus 93,† and the quantity turned out during these amounted to 22 684 maunds 20 seers, or an average of 243 maunds per diem.

Number of working days.

Prices highest, lowest, and average.

36. The highest price at which, during the above time, salt was sold was Rs. 1-12 per maund realized on the 21st or 23rd of April for 10 maunds 25 seers of salt produced at Kurrumtulleea (*vide* paragraph 8, No. 1 and para. 15). The lowest price accepted was 6 annas per maund for one maund and one seer made at Goolurreea (*vide* paragraph 8, No. 9). The average has been 12 annas 6 pies.

Salt how cleared by traders.

37. The following is the process by which salt is cleared for traders:—The first step is payment of duty and cesses on the quantity which it is intended to purchase. The money being

* A book is kept in two volumes in Vernacular, in which all entrances and clearance of salt are recorded. The volumes come into use on alternate days, one being in the Patrol's Office for posting of registers, while the other is in use for the current day's work.

† From 1st April to 24th May the following interruptions, by reason of weather, occurred, *viz.*, east wind 10 days, cloudy 20 days, rain 5 days, or a total of 35 days on which the weather was more or less unfavorable. So serious a reduction, amounting to no less than 37·63 per cent. of the whole period, was in itself a formidable addition to our difficulties.

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lodged with the Patrol,* a receipt is given to the trader by whom it is taken to the Mundee, the Assistant Patrol in charge of which allows the intending purchaser to examine the salt and make his bargain with the owner. Terms being arranged, the salt, after weighment with Government weights in hand scales, is brought by the buyer and seller together to the weighing shed, where it is weighed anew by the Patrol, or the senior Sub-Assistant Patrol, when, after deduction of tare, and of allowance of $2\frac{1}{2}$ per cent. for dryage,† more salt is added if the remainder falls short of, or is resumed and re-pitted, if it exceeds the quantity specified in the receipt. As a rule, the former result prevails. A rowannah (so called, for the document bears no resemblance to the elaborate paper known by that name on the Inland Customs Line) bearing seal and signature of the Patrol, is given to a peon who escorts the trader to the gate out at which he is passed by the Jemadar on duty, after inspection of the rowannah; it is then returned by the peon to the Patrol in whose office it is filed. The only paper of which the trader is allowed to retain possession is the receipt which is given to him when he lodges his money.

Temporary impounding of sale proceeds.

38. Just now,‡ pending settlement of the question of resumption of tuccavee, the *price* of the salt is lodged with the Patrol.

The season's operations; their issue.

39. The result of the season's operations may be concisely described as a general loss; loss to all concerned—to operatives, to Kisans, who with rare and as yet uncertain exceptions have failed to recover their outlay; to Bhutteyas, who have gone away in debt to their Kisans; to talookdars and other land-holders, whose land has come within the enclosure, and whom the royalty has not repaid for the land revenue which they had to forego to Government, which has spent, on establishment alone, without counting constructions, six times as much as has resulted from the cess which was to have covered the outlay. There is reason to believe that the advances taken from Government have been largely supplemented by loans of money at the usual ruinous interest from local money lenders,§ or at equally disastrous rates of grain from zemindars.

To workers.

To Talookdars, &c.

To Government.

Tuccavee supplemented by private loans in coin and grain.

Causes of failure.

Difficulty of obtaining labor.

40. The causes which have combined to produce this failure are various, but all centre in one first cause—the difficulty of obtaining labor. I have the satisfaction of feeling assured that it is well understood by the administration of Oudh that, whatever may have been the personal opinions of the heads of this department on the merits of the question of reviving a local manufacture of salt, once that question was decided in the sense that the experiment ought to be tried, *their* determination was taken to spare no effort to make the trial a success. This conviction enables me to write plainly.

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* A purely temporary arrangement, allowable, perhaps, on the principle of smoothing away all points of first friction, but open to palpable objections, where no proper Treasury arrangements and no armed guard are maintained. Just now coin is kept in a not over-strong box, and as soon as 1,000 Rupees are in hand, is remitted to the Poorwa Tehseel. This limitation of balance will henceforward, as long as the local receipt of coin is permitted, be adhered to more rigidly than has heretofore been the actual practice.

† None is allowed by the seller.

‡ That is, from the 18th of July.

§ Mr. Hay questions this, but the assertion has been made by so many persons that one is compelled to think it well founded; and while I have little doubt that individuals have exaggerated the amount of their loans, I quite believe that loans have generally been taken; and paragraph 24 of Mr. Hay's own recent report of the 30th ultimo, in which he asserts that he ought to have been more liberal with tuccavee, confirms this conviction; for if our advances were not sufficient, they must have been supplemented *from somewhere*, and to borrow money was the evident source of supplement.

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Existing condition of salt-making classes.

Effect of public works and agriculture.

41. Allusion has already, in paragraph 16 of this Note, been made to the altered condition of the hereditary salt-makers. They are known to have been drawn in thousands to the various public works, far and near, at which their earnings are large; and of those who have remained at home, the majority, if common report of all classes can be believed, have found occupation in agriculture, which not only furnishes themselves with at least a fair living, but makes it very greatly to the interest of their owners of lands newly brought, or to be brought, under tillage, to induce them to remain where they are. We had thus against us, *firstly*, a diminution of labor by emigration and diversion to other occupations, and *secondly*, the influence of a potential class who, however fairly they might speak the English official who urged them to aid the new movement by supplying drafts of men, could not be expected to look with eyes of favor on a scheme which, while it held out to themselves no benefit whatever beyond the very indirect one of promising to make their modicum of salt a little cheaper, was likely to do them the direct disservice of denuding their estates of industrious tenants or laborers, most of whom were probably their debtors as well. It would be asking too much of human nature to expect earnest co-operation under such conditions, and I am told that in this very neighbourhood* the influence of landholders has been directed towards keeping the classes we require from engaging at our works.

Interests of landholders, how implicated.

Obstacles arising out of the foregoing.

Resulting in a scanty supply of labor.

42. Out of this combination has arisen the first obstacle—a scanty and reluctantly-conceded supply of hands.

Comparison of profits in agriculture and in salt-making.

43. Practical men whom I have here consulted have told me that under favorable conditions the production of salt will yield profits superior to those of small agricultural holdings. It will no doubt be possible, through the kindness of the District Officer to whom application has been made, to ascertain with fair accuracy the average profits of small cultivators; but against such a computation we are not as yet, for reasons hereafter to be exposed, in a position to display, with any approach to reliability, the profits of an ordinary salt work.

Hindered by absence of trustworthy data on the latter.

The salt-makers' objects.

44. Looking at the matter from the salt-makers point of view, one of two things was essential to draw them in, *viz.*, a system lax enough to leave large secret profits, or this being refused, a *local monopoly*. Question the men themselves as to what is esssential to make these works succeed, and the following are *their* remedies—all included in the one word *purwustee*, *viz.*,—

What they ask for.

(1). A lowered rate of Duty.

(2). Stoppage of Kharee and Gooraree salt. The latter is here the generic term for western produce, and the two have been bracketted in the mouth of every salt-maker to whom I have spoken.

45. In other words, it was, according to the makers themselves, with every leading man among whom, now on the ground, I have talked these matters over, not enough that

* I am conscious that information of the kind must be accepted with reserve, but this accords too completely with common sense deductions to be rejected *without* reserve. Since the above words were written, a Nooneeah Chowdree* from Jhubroulee, in the Lucknow District, has just told Mr. Hay, in my presence, that the landholders of that neighbourhood in which 4 to 500 families of salt-making castes exist, are giving leases at reduced rates to induce these to remain, and that these landholders are averse to their people engaging with us.

* Churun, son of Bodee, by name.

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Government should permit the manufacture, should provide land and advance money. This was but half the battle; Government had next, by severely excluding all but *their* produce to *force the latter on the market.*

"Gooraree" or imported salts.

46. "Gooraree" is a great word among these people, of which fact I had but a few hours ago a curious illustration. Questioning a very leading salt-maker of Chupkaha, the locally well-known Seetul, as to the quality of salt produced during the rains, he wound up a dissertation on its superiority over ordinary produce by the words *Gooraree-ke-moowafik.* Putting aside the admission implied in these words of general inferiority of local salt, it has been abundantly proved to me that the people here stand in great awe of the commercial rivalry of the western salts; and without seeking to dispute that the sale of an inferior salt, mostly provided by mechanical treatment of the sulphate of soda, made in Futtehpore, Cawnpore, and elsewhere in the North-Western Prvinces, and here and there in Oudh too* is capable, unless promptly checked, of seriously interfering with local out-turns, I have now no hesitation in saying that the salt-makers themselves stand more in dread of the influence of the "Gooraree"—a word hitherto and somewhat inexplicably kept out of the discussion. In reality, the western salts are the only formidable rivals, for no one dreams of stopping *them.* Oudh is to be a fair field for them and the local produce; whereas, admitting all that has been said of the "thousands" of maunds of impure salt,† with which the sulphate of soda works have been described as flooding the province, a remedy for this is possible, once certain facts, now under trial, are established.

Their influence, &c.

Salts from works for sulphate of soda.

Great influence of imported kinds,

which cannot be stopped,

while the other may.

Original misconception on subject of salt works.

47. It must by this time be apparent to whoever will dispassionately review the facts which the crucial test of some nine months of practical endeavour in the shape of right hard work to resuscitate the salt manufacture of Oudh has disclosed, that an original misconception has underlain our plans. It was believed that so anxious were the salt-making classes to see their ancient trade re-established, that they would readily accommodate themselves to whatever precautions might be held essential to the security of the State revenue, and would eagerly respond to an invitation to exercise their craft on terms which implied a fair commercial contest with the western salts. It is now fully apparent that this was by no means the idea of the salt-makers themselves—what they probably looked forward to was a supervision more nominal than practical, and abundantly perforated with facilities for evasion. It was naturally a disappointment to those who, with such notions, first answered to our call, to find themselves confronted with measures which, even in their present relaxed condition, have made anything like illicit profit a thing too hopeless to be seriously tried for.‡

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* The works at Bala, in Roy Barielly, were denounced to me the other day, in this very enclosure, equally with those of *Gunga par.*

† Without seeking to deny that injury has been done to the regular salt trade by the impure kharee salt, sharing, indeed, in the belief that such *has been the case,* it is almost certain that common rumour has, as usual, much exaggerated the reality. To begin with, the "many thousands of Oudh Nooneeahs" working at Kharee in Futtehpore and Cawnpore, is simple nonsense; for according to my best information, 4,500 would cover every soul so employed, so that granting that none but Oudh men were there (and we who know of the communities settled there for years past know better than to believe *that*), the term "many thousands" would still be a misnomer, while all efforts hitherto made have failed to catch any but the smallest quantities of kharee circulating in Oudh. True, these last efforts commenced late, but still early enough to have revealed something, had thousands of maunds really been pouring *into* Oudh.

‡ A small quantity of salt has been secretly buried to our present knowledge. Absence of our wall and guards would have multiplied these secret stores in a genuine geometric progression.

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Influence of provision of [illegible] found to have been [illegible]

48. Among secondary influences which have told against the season's results, one of our own provisions, the enclosure wall, has, it is now proved to me, retarded the general progress. Mr. Hay asserts, and his statement has been confirmed by independent inquiry, that labor from outside was not, at the time when the work was begun, available, except on conditions much more expensive than he was inclined to accept;—spending Government money, he had to make it go as far as possible, and he took labor whence he could get it most readily, and on terms which appeared to him equitable, *viz.*, from among the people already within the enclosure. Looking at matters by our present lights, all this, the very construction of a costly* enclosure before we had anything worth guarding, to enclose, and the diverting of interior labor from its natural purpose, may easily be adjudged to have been mistakes. It *might*, I now believe that it *would*, have better served our purpose to have accepted the risk of some salt slipping away, until we had a considerable body with capital involved implicated in the scheme, before we took in hand the wall, which not only withdrew labor from salt-making, but opened the eyes of all within its limits, and of many others† who might not improbably have joined in the venture to the futility of one of the hopes on which it is my conviction that every Nooneeah and Lodh rested. It *might*, and again I may say *would*, have been better had Mr. Hay, when the real effect of the wall on the minds of the people became apparent, or when he saw that to compass it he must turn what could hardly have been willing labourers from their own pursuits,‡ called the attention of his superiors to the facts and asked for orders. Risk might have been accepted: a little more outlay might have been approved. But this is wisdom after the event, and as regards Mr. Hay, large allowance must be made for the pressure of all kinds, and for the difficulties, needless to enumerate, under which he was laboring.

Effect of the wall.

Labor whence procured.

Effect on salt works.

What led us to devise a wall.

49. As regards the heads of this department, their invention of the boundary walls, and their anxiety to see these accomplished, were part of the fruits of the general misconception described in paragraph 47. Putting aside their own belief, they acted on the impression that, once the *fiat* issued, crowds would gather to the work: a preventive cordon was known to be essential, and, except at ruinous cost, could not be complete unless supplemented by an inanimate barrier. The hedge to which we have always looked forward, and the first sprouts of which are now coming up, must be a work of time, and we fell back on the idea of a wall. Had the real facts been known, had our own prejudices on the subject been strengthened by being told that the plant which we were ordered to rear was so sickly that unless pampered and sheltered it would wither in its first season, our action would certainly have been different.

Much wood having to be felled, &c., aided in retarding the work.

50. Another great piece of work which had to be undertaken was the felling of thousands of trees (which, in course of time, had grown up all over the ground), and which took up much of the time which might otherwise have been devoted to preparation of works. Clearing of refuse, *i. e.*, accumulations of vegetation, &c., &c., from the surface of the soil, also occupied much time before the real work could be taken in hand.—(Mr. Hay).

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* The wall and its gates have cost Rs. 3,154-14.

† It is said here that the people *within* were freely bantered by those *without* the wall as *kydees*.

‡ Among the effects of this was positive injury to plant. Patas imperfectly lined were, in some instances, ruined while their owners were at the wall, and had to be plastered anew.

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51. Another source of disappointment has been that, one and all, we have expected too much—have demanded, from the space of time involved, more than it was capable of realizing. Somehow the fact seems to have been overlooked that we were about to crowd into one season all the labor, all the expense of a first establishment, which had to be created anew, *de fond en comble*, and the cost of which would have to be recouped in more than one. Many of the Kisans, the master saltmakers, have expressed to me their appreciation of this fact, and the better informed among them admit that their outlay on plant for another season will not be much more than one-fourth of that just incurred. They had to create a fixed capital now in their hands. They have been disappointed in their expectations of prompt clearance of produce, about half of which remains unsold, and they chafe under the inconvenience of lying out of money, possession of which would just now be very convenient to them. We, on our side, have been too anxious for success, and did not, in anticipation, appreciate the effect of the many obstacles but natural to the resuscitation of an extinct industry. No capital error as to management of the works can, to the best of my knowledge, be attributed to our local officer. Coming here to discover in what lay the secret of our failure, it was my duty to be watchful for such errors, and I have looked for them carefully. I have been much among the people, mostly without Mr. Hay; but, after many days spent on the ground, I can lay my finger on nothing of which I can say "*this* is *the* source of our ill-success, and has been brought about by error of judgment or neglect of duty on the part of the officer to whom our arrangements were entrusted." Mistakes have been made,* and where I have chanced on one, I have said what has seemed to me needful; but none that I have discovered have been of weight sufficient to swamp the scheme. What have hampered it may be concisely grouped as—

Too much was, on the whole, looked for.

No serious error traceable to the officer in charge.

Epitome of causes of failure.

(1.) Lessened supply of labor.

(2.) Want of interest in the matter, on the part of the castes concerned, who have found other and profitable occupations.

(3.) Secret hostility of landholders to a project which denuded their lands of useful laborers, tending of course to raise the cost of such labor as remained.

(4.) Miscellaneous hindrances mostly natural to the situation.

52. Difference of opinion exists as to the ability of this produce to compete with the western salts. Thus, Thakoor Maipal Singh asserts that it can always undersell the foreign salt by a seer to a seer and a quarter in the Rupee, while Muttooreea Brahmin, a master salt-maker, volunteered, the remark that he had been at Sooltanpoor, had seen the process there in use, and that salt could there be made much cheaper than here, *because there was only one labor, the raising of the brine, to be undergone.*

Ability of local to compete with imported salt.

Various opinions.

53. It is impossible to deduce from existing results any reliable inference as to future cost of produce. In the first place, no one worker has worked as long by at least 60 days, or made as much by one-third at very least as he ought to have turned out even for the number of days in account; and if it were

Impossible to deduce reliable inferences from existing data.

* The multifariousness of Mr. Hay's occupation involving treatment of many matters to which he was entirely untrained, will not be overlooked, when higher authority comes to judge of these.

possible (*which it is not*) to obtain the actual truth as to his outlay from every master-worker now on the ground, so many allowances (for lateness of beginning, for effect of weather, and for concentration of outlay, *inter alia*) have to be made that the account would be mere figure work and entirely untrustworthy.* Great uncertainty on this question of original cost will always prevail. Cost will vary from Dowana to Dowana from natural causes, *e. g.*, in the northern Dowanas, twig-lined wells answer all purposes; in some of the southern, the much more costly wood lining† is indispensable, and the strength of brine varies greatly. Personal qualities of workers will introduce other variations from work to work: a gang of Lodhs, who every now and then permit themselves to drink, may well get out less salt in the same time, than one of Nooneeahs who are always sober.‡ As for the owners of works, it is simply impossible to believe what they say. Zalim Singh, master-maker at Jeeakhera, told me that he could not sell his salt at profit for less than a rupee per maund; but that the men of Goolureea, where the brine was richer, could sell theirs for eight or nine annas. The Goolureea men, on being questioned, protested that nothing less than fourteen annas would save them from loss.

Variations in original cost.

Conflicting statements of workers.

54. The future of these works depends just now on the solution of one question,—can labor be attracted hither? and over this it is profitless to theorize. Actual trial must decide; but as it will not do to sit still and wait, spending more and more money meanwhile, I strongly advise that Mr. Hay be at once deputed to visit those parts of the Province where salt-makers are known to herd, and in concert with the District Officer, and by aid of the leading Talookdars, with most of whom Mr. Hay professes to be acquainted, see what are our prospects on this head.§ If aided as he will be by the District authorities, Mr. Hay can induce a sufficient number to resort to the works, where they ought to be by the 1st of January (if responsible men can be found to answer for repayment of any small earnest money, such as a rupee each, to be repaid as the season goes on, it might be well to risk something in this way), then we may yet hope to see the Mullowna Salt Works endure until the completion of certain railway lines brings them in contact with conditions which they may or may not survive. It may happen that as the news of revival of this industry spreads and circulates, many, now working at distances from their homes, may be attracted back to an occupation to which they are believed to be attached.

The future dependent on supply of labor.

Deputation of Mr. Hay to seek labor advised.

55. I cannot, however unwillingly I write the words, defend myself from the conviction that no sufficient supply of labor will be obtained. Remembering how many interruptions must be looked for in a process which depends so completely on the state of the weather, and bearing in mind all other causes which may interfere with even continuity of labor,‖ I look to 8,000

Personal view of chances of obtaining labor.

Lowest number with which work is feasible.

* On one point all landowners and master-workers agree, that if one Rupee per maund can be obtained as the sale price, the works will prosper. I believe that in stating the approximate cost at an average of 10 annas, Maharaja Dirig Biji Singh, of Bulrampoor, has gone nearer to the truth than any one else.

† The wells being shallower, can however be worked by less costly bullocks, and this equalizes the expense with that of twig-lined wells.—(Mr. Hay.)

‡ Some good salt will be made during the rains. All agree that the quality will be excellent, but no one can say how much will be made.

It is made by the "Gooran" process, *viz.*, by mere scraping of the salinated earth, as this dries on the surface during breaks.—(Mr. Hay.)

§ Visiting the north-west even at need.

‖ Sickness, holidays, fairs, marriages, deaths, accidents to plant or to laborers, are some of these.

men as the very lowest number which we can expect to see turn out the 200,000 maunds of salt which would bear Government through its expenses, and having cause to believe that there is a very general discouragement among those who have so far joined in the venture, and that the Bhutteyas who have dispersed to their several houses, will give anything but an alluring account of their experiences here; recalling, too, what I have been told of the feeling of landholders (*vide* paragraph 41), I own to feeling that the task of inducing nearly three times the number to come in for another spell of work, appears to me to be arduous almost to desperation.

Prevalent discouragement

56. Nevertheless, arduous or easy, hopeful or desparate, the trial ought to be made. If labor *cannot* be got, there will be nothing for it but to close the works; but, before this very humiliating conclusion could be recommended, a serious and business-like attempt should be made, all through Oudh, to recruit workers, while, in the north-west, closing every sulphate of soda work, against which we can prove any tangible breach of faith, we aid the movement here by causing our officers to indicate these works as the resort for all those who still desire to follow an hereditary calling. Another consideration which ought to urge us to strain every nerve ere we own ourselves beaten, is, that, unless Government by waiving (in cases of pure loss) recovery of tuccavee, should consent to bear the consequences of what (should failure after all force its way to recognition) will have been its own mistake, all those who aided us by lending their names as sureties will suffer lamentable and often ruinous loss. The experiment was for the benefit of the people of Oudh, and it would surely be more equitable to charge any loss to its general revenues than to suffer this to fall with annihilating weight on the heads of a miserable few who backed Government with their labor, or with their credit, in an experiment which cannot be said to have had as yet a fair trial.

The most strenuous effort should stil be made.

Additional reason for striving to succeed.

57. This brings us to the question, should the tuccavee advances be at once realized? or if hope remains of a successful issue, would it be better to spread their realization over a longer term? On general grounds my first inclination, contingent on hope of continued working, would be to advocate the more lenient measure. It is useless, and would be mischievous to ignore the general discouragement even of some who, if ultimately they may not actually lose, are meanwhile put to great straits by tardy realizations; still worse of course those (the majority) who have an assured loss to brood over. If to all existing burdens we add that of instant repayment of advances, the outcry will be loud, will reach far beyond these walls, and lessen, I conscientiously believe, whatever chances we just now hold of inducing others to join in the work.

Question of promptly realizing advances.

Effect of such a measure would apparently be mischievous.

58. It will be proper here to notice a remark made to me in Oonao by the Officiating Deputy Commissioner Mr. Wood, to the effect that, unless we realized now, we should not realize at all, and to recall that Mr. Hay has expressed to the Commissioner of Inland Customs, his opinion that were we to fail to realize presently, the sureties would hold themselves released from their bonds.

Opinion of Officiating Deputy Commissioner of Oonao.

59. I have carefully studied the wording of these bonds,* and the only indication which I can see of anything which could be construed as limiting the currency of these to any particular

Wording of bonds.

* Not "salt of this season," but "salt" generally.—*Vide* Appendix.

Does this imply limitation of time?

itme is in the phrases (alluding first to the borrower) "and promises to pay on preparation and sale of salt,"* and (alluding to the surety) "if so and so, at the proper, time shall refuse, &c. Now if, in the opinion of the Financial Commissioner, to whom, in a few hours after completion of this paper, these facts will be submitted, this wording ties us to time, we must realize, as each man sells his salt, or induce the sureties to renew. In most cases, sale will not have covered outlay, and the surety will have more or less to pay. Under such conditions, he would probably be found docile enough about renewing his bond. If, on the other hand, the surety bond is of unlimited effect, it rests with us to realize when we like.

Customary period for which advances are made.

60. On the other hand, the custom of the Province seems to be to give out advances for agricultural purposes for three years,† and it is very possible that, not much accustomed to fine distinctions, all concerned in these bonds may have expected to see them extend to the familiar period. As there seem to me peculiarities in our relations with the principal surety, which make it unadvisable for *me* to stir the general question until I can personally discuss it with the Financial Commissioner, I have, of set purpose, refrained from interrogating parties to bonds as to their impressions of the terms on which advances were taken.

Probable impression of the people.

Security for advances.

61. I now come to the question of how we stand as to security. Altogether (*vide* Annexure D.) we have a balance of Rs. 19,568 to realize. Of these, Rs. 13,808 are on surety of Talookdar Deena Singh,‡ through whose son, heir and general agent, Maipal Singh, all the payments have been made; Rs. 1,230 on that of Talookdar Muhesh Buksh, and Rs. 717 on that of Bowra Lodh, a well-to-do landholder. These make up Rs. 15,755. Of the balance of Rs. 3,813, a sum of Rs. 1,515 (A.) issued through Mahanund Patwaree, of Juggut Khera, is on surety of divers Lodhs, and, although legally secured as far as bonds go, may turn out difficult to realize: Rs. 50 are on surety of the Putwaree himself. Of the remaining Rs. 2,248, Rs. 1,501 (B.) are on surety of three Thakoors—Goolab Singh, of Punair (Rs. 825), Puhlwan Singh, of Sureynapoor (Rs. 466); and Thakoor Singh, of Urhowlee (Rs. 210), whom the answers to references to the Tehseels show to be worth§ a good deal less than they are bound for; Rs. 313 to Churun, a master-maker of Narainapoor; Rs. 369 to Thakoor Zalim Singh, of Jeeakhera, and Rs. 20 to one Seeta Ram, of Oonchwa, total Rs. 702 have been advanced, without security, on Mr. Hay's conviction of the solvency of the recipients, and the final sum of Rs. 45 is on the security of Thakoor Khooshal Singh, of Oonchwa. For all details of the aggregate of Rs. 3,813 see Annexure E., and for particulars of every advance, Annexure F.

Doubtful items.

62. Over the sums marked (A.) and (B.) in the preceding paragraph, aggregating Rs. 3,016, or 15·40 per cent. of the whole balance, some trouble might be experienced, unless I am wrong in my estimate of the Tehseel reports on the sureties under (B).

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* *Vide* Annexure C.

† In a report to the Financial Commissioner, which he is on the point of despatching, and which I have seen since the above was written, Mr. Hay says distinctly that such was the impression among the people.

‡ The value of this estate is given by the Oonao Court at Rs. 4,994 × 8 = 35,952, *i. e.*, the Government jumma at eight years' purchase. General Barrow considers the estate worth from Rs. 40,000 to Rs. 60,000.

§ At least this is how I translate the word.

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Supposing them to be sound men, the most doubtful item (A.) would be 7·74 per cent. of the outlying advances.

An erroneous impression entertained by Mr. Hay.

63. In respect to this sum (A)., I found Mr. Hay laboring under what at the time I thought a false impression as to the effect of an institution called by him *Zunjeerabundee*, " by virtue of which he seemed to think the putwaree, notwithstanding the absence of any bond of his except for Rs. 50 and every surety for any one man of those who received advances through the putwaree, individually answerable on some unlimited liability principle for the aggregate." Seeing no possible harm in a general inquiry as to the feeling of the people on the question of *Zunjeerabundee* (I never had any doubt as to what such an arrangement might be worth in law), I made, in Mr. Hay's presence, such an investigation as showed that, supposing A. to become surety for B. for Rs. 100, and B. in his turn to be surety for C. for Rs. 50, it was useless to expect A. to answer for Rs. 150, supposing B. and C. between them to fail to pay the Rs. 50, while B. for himself failed to pay his Rs. 100. The worst that could, according to caste code, happen to B. would be his social exclusion. If this total of Rs. 1,515 *should* cause any trouble, it will be due to this misapprehension on the part of Mr. Hay.

Collateral security.

64. As collateral security for the aggregate of Rs. 3,813, which, as shown in the paragraphs immediately preceding, include some doubtful items, we have about 1,528 maunds 14 seers of salt in store; and about 10,651 maunds, which may go to lighten the strain on the more trustworthy sureties,—Deena Singh, Muhesh Buksh, and Bowra Lodh.*

Peculiarity of position with respect to Deena Singh.

65. But the peculiarity of our relations with Deena Singh cannot be passed by unnoticed. *We have no kind of bond for any of the sums for which he is supposed to be liable.*

Explained by Mr. Hay.

66. We hold, it is said, in the Oonao Treasury, his agent's (Maipal Singh's) stamped receipts for every sum paid through him,† but this is all. Mr. Hay's explanation of how this state of things came about is to the following effect:—First of all, that he was told not to be over particular about legal security. He has by him a note from Mr. Steinbelt, formerly an Assistant Commissioner in this District, in which the latter mentions having seen a letter from the Commissioner of the Division to the Deputy Commissioner of Oonao to the effect above-mentioned. On this note is an endorsement in the hand-writing of the Commissioner of Inland Customs, directing Mr. Hay not to act on its purport without direct orders from the Financial Commissioner, to whom he was directed to refer. This reference he believes himself to have made, but is unable to trace his own letter, or to say if the correspondence were official or demi-official.

Mr. Hay's explanation continued.

67. Secondly, Mr. Hay asserts that he always intended to take a bond, as soon as all the advances for which Maipal Singh was to render his father responsible were paid out; but that, before the disbursements in question were complete, the estate of which Maipal Singh is manager, came under administration by the Oonao Court, which, in Mr. Hay's opinion, makes any legal bond unnecessary. He asserts that he was told by Colonel Chamier that he (the Colonel) had recorded the departmental claim, and " that it was all right. " Mr. Hay describes himself

* There may also be about 300 bullocks in the enclosure (many of these were allowed to go out when work ended—the sureties consenting—and some were released, during Mr. Hay's absence, by Mr. Patrol Jones. In this latter case, it is not known if the sureties were consulted.—(Mr. Hay.)

† (Mr. Hay.)

as having gone to the Financial Commissioner, and as having told him that the said estate was about to be sold for a claim of the Bank of Bengal for Rs. 10,000, mentioning that he (Mr. Hay) had taken no legal bond for security for advances, inasmuch as the sum to be issued was not yet completed, and proposing to buy the claim of the Bank, so as at once to save the estate and assure the departmental interest. Mr. Hay then proposed to consult the Judicial Commissioner, to which the Financial Commissioner assenting, Mr. Hay went to Mr. Capper and explained the position. Mr. Capper is said to have remarked that the interest of Government must be secured, and that he would send for the file and pass the necessary orders. Hearing that the sale was fixed for the next day, Mr. Hay proposed to go to Oonao, did so; saw Colonel Chamier; arranged with him to stay the sale; record the claim of the Government for advances to salt-makers against the estate, and bring the latter under Court management. This is Mr. Hay's account of the transaction taken down from his own lips and read over to him. The authorities quoted make any expression of opinion by myself, on points which I do not yet understand, unnecessary.

Culturable lands, &c.

Royalties, &c.

Proposal of Commissioner of Lucknow Division.

Management has fallen to Mr. Hay.

His system.

68. It remains to notice the question connected with utilization of lands within the enclosure not required for salt manufacture. In his letter No. 82 of the 14th—15th January 1870, Mr. Currie, then Commissioner of the Lucknow Division, proposed, paragraph 4, while granting a royalty to Deena Singh, to buy out Muhesh Buksh and Bowra Lodh, proprietors of much smaller shares of the enclosed lands. Mr. Hay says that this latter intention has since been abandoned, and that the two last-named are, equally with Deena Singh, to receive royalty according to their shares in the land; but I am unable to trace any correspondence to this effect. The proceeds of such salt lands as were not required for salt-making, and of groves, tanks, &c., Mr. Currie proposed, after deducting rent, to place at the disposal of this department to provide for internal roads and conservancy and dispensary arrangements. From the wording of Mr. Currie's letter, it may be inferred that he meant all these proceedings, down to the payment of rent due to Government, to be the work of the District authority; but this has lapsed to Mr. Hay,* who, through the agency of the old proprietors, has been leasing lands, &c., &c., on the following principles:—

First, provision to be made for salt-workers, who, their homes being distant, desire to remain here.

Next, for resident salt-makers, who formerly held lands within the enclosure.

Next, for resident salt-makers, who have hitherto not held lands within the present limits.

Lastly, for those residents within the enclosure who, as village servants, are, by services rendered to salt-makers, indirectly connected with the manufacture.

The former landholders to allot the lands, collect the revenue at harvest time, and pay the same to the Assistant Commissioner of Inland Customs, instead of as heretofore to the Tehseeldar, receiving *hukk zumindaree* for their trouble.

A premium of 8 annas on rent of Rs. 5 and of 1 Rupee on rent above that sum, to be allowed to cultivators.

* This arrangement appears to have been made verbally between Mr. Currie, Colonel Chamier, and Mr. Hay.

OUDH AND JOUNPORE LOCAL SALT WORKS.

69. Just now all these arrangements are yet crude, not to say in confusion. There is some complication with Maipal Singh about proceeds of trees felled, and charcoal made and sold by him.* The accounts of this transaction as well as those connected with leases of land, being as yet altogether incomplete, I can come to no opinion concerning them, nor can now afford to await their completion. But Mr. Hay declares himself competent to settle everything in a very few days.

All arrangements connected with land are as yet incomplete.

70. On general grounds, I dislike the idea of our being saddled with these land revenue arrangements. Mr. Hay may be competent to deal with questions, to consideration of which he has not been trained; but he may not always be in Oudh, and to any successor of his, revenue administration might, without reproach, be a *terra incognita*.

Personal opinion as to management of lands by a Customs official.

71. Expenditure and realizations were among the headings set down for notice in my rough notes for this paper, but while it was being written, Mr. Hay has received, from the Commissioner of Inland Customs, a statement re-adjusting and correcting one of his own, which I cannot do better than reproduce. It is more liberal than that which I contemplated, as I should probably have charged in their entirety, sums of which Mr. Hume has allotted percentages only. These are his figures:—

Expenditure and realizations.

Disbursements.

		Rs.	As.	P.
Irrecoverable tuccavee,—*vide* paragraph 62 of this Note, 10 per cent. on total		2,482	1	7
Government buildings 20 per cent. on total ...		394	4	7
Boundary wall, 25 per cent.		788	11	2
Mundee, ditch, &c., 25 per cent.		12	9	11
Roads, 20 per cent.		29	4	0
Chokees (preventive posts)		18	6	0
Experimental works		1,197	12	0
Establishment		3,771	15	6
Contingencies		276	2	5
		8,971	3	2
Receipts, *i. e.*, cess on salt		585	4	7
Percentage of expenditure on realization ...		1,533·50		
Percentage of realization on expenditure ...		6·52		

A statement of all sums received and expended accompanies.

72. It has been matter of consideration and frequent consultation with Mr. Hay, whether the Customs Establishment now on the ground might not be decreased. On one principle we are completely at accord, *viz.*, that whatever is the minimum with which work can proceed during the open season, must be kept throughout the year. The men composing that quantum

Establishments.

Can it be reduced?

* The present arrangement as to produce of trees, groves, &c., had not been made when this cutting of trees, essential to clearance of ground for salt-making, began in November, when Mr. Hay was in possession of no orders on the matter of produce of the above nature. Maipal Singh was told to clear the ground, and carry the proceeds after payment of expenses to credit of the estate. Such felling, &c., was stopped on Mr. Hay becoming aware of the arrangement made by Mr. Currie.—(Mr. Hay.)

must be taught that during good behaviour their living is a permanent one. We have next carefully gauged the number of men by the work to be done, and are both of opinion that the existing force* is actually the very minimum for the open season. Mr. Hay, indeed, says distinctly that he will require more hands, *á propos* of which we *may*, under sanction of course, for in that case the expense must be charged to the works, be able to lend men from the Internal Branch and so keep the general expenditure down. Mr. Hay has, in fact, already resorted to this expedient, as far as the loan of men is concerned. During the present slack season, less than half, a third of the men, could do all there is to be done; but were we to act on this basis and reduce our hands as soon as the rains set in, the composition of our force would be as follows:—

One-third, whose presumable interest (tempered by their dread of being themselves selected for reduction), would be to behave well.

Two-thirds, whose palpable interest would be to make the most of any chance of illicit gain. To carry out such a system as this would, in my judgment, be false economy.

MALLOWNA,
The 29th July 1870.

F. W. VERE.

* Mr. Hay has already made the Commissioner aware of his views regarding the allowance of the Patrol, but appears now to think retention of the senior Sub-Assistant Patrol desirable.

OUDH AND JOUNPORE LOCAL SALT WORKS.

ANNEXURE A.

MALLOWNA.

Arable land.			Salt Mehals.			Groves.			Barren land.			Roads.			Village site.			Name of village.
Beegahs.	Biswas.	Biswansees.	Beegahs.	Biswas.	Biswansees.	Beegahs.	Biswas.	Biswansees.	Beegahs.	Biswas.	Biswansees.	Beegahs.	Biswas.	Biswansees.	Beegahs.	Biswas.	Biswansees.	
304	3	17	349	16	15	2	0	6	11	13	11	2	13	18	63	7	19	Mallowna.
167	15	0	32	0	13	39	8	14	9	1	13	3	17	7	7	19	19	Pursura.
135	10	8	29	14	4	22	14	2	16	15	0	2	1	10	15	9	16	Maharajpore.
170	10	9	101	6	6	0	0	0	41	13	5	1	10	4	5	4	8	Dainta.
171	14	12	22	13	12	0	0	0	78	14	15	0	0	0	1	3	0	Byaspore.
20	0	0	18	0	0	0	0	0	15	0	0	0	0	0	5	0	0	Oonchwa.
		Gooran	10	0	0													
57	13	4	37	2	9	31	11	12	4	16	5	0	0	0	0	0	0	Poorai.
1,027	7	10	600	13	19	95	14	14	177	14	9	10	2	19	98	5	2	

This paper, with exception of the Oonchwa and Poorai figures, is compiled from Putwaree papers.

OUDH AND JOUNPORE LOCAL SALT WORKS.

ANNEXURE B.

Memorandum of result of Clearance of certain Pits of Salt.

Name of Dowana.	Name of manufacturer.	The quantity the Pits were estimated to contain.	The actual quantity contained in the Pits as shown by weighment.	Remarks.
		Mds. Seers.	Mds. Seers.	
Sahibgunge ...	Ousari, &c. ...	255 3	255 3 40 3	
			295 6	Increase.
Bhooreehar ...	Mukkoo ...	38 16	38 16 7 22	Increase.
			45 38	
Ditto ...	Buldee ...	26 9	26 9 3 20	Increase.
			29 29	
Nareepar ...	Ousari ...	13 3	13 3 0 38	Increase.
			14 1	
Goolurria ...	Prem Sookh ...	212 21	212 21 6 33	Increase.
			219 14	
Ditto ...	Gunesh, son of Jhokhee ...	286 27	286 27 29 25	Increase.
			316 12	
Ditto ...	Gungadeen ...	104 23	104 23 11 21	Increase.
			116 4	
Ditto ...	Goor Bux ...	225 27	225 27 24 14	Increase.
			250 1	
Ditto ...	Ujrail ...	169 19	169 19 7 24	Increase.
			177 3	
Ditto ...	Gurdha ...	196 11	196 11 12 20	Increase.
			208 31	
Ditto ...	Badal, &c. ...	207 10	207 10 24 14	Increase.
			231 24	
Ditto ...	Gunesh,* son of Sheo Lall ...	61 35	61 35 33 18	Increase.
			95 13	
	Total ...	1,197 4	1,797 4 202 12	Increase.
			1,999 16	

* This man has not quite exhausted his pit yet.

OUDH AND JOUNPORE LOCAL SALT WORKS.

ANNEXURE C.

No.	Name of Recipient.	Amount of Tuccavee paid.	Detail of Tuccavee recovered.			Balance.
			Amount recovered up to 30th June 1870.	Amount recovered from 1st to 20th July 1870.	Total amount recovered.	
		Rs.	Rs.	Rs.	Rs.	Rs.
1	Malipal Singh, Agent Talookdar, Mallowna	17,503	2,603	1,092	3,695	13,808
2	Muhaish Bux, Talookdar, Behar ...	1,725	69	426	495	1,230
3	Bowra and Suktoo, Lumberdars, Bhungwuntpore	1,030	97	216	313	717
4	Goolab Singh, Lumberdar, Punaee ...	965	38	102	140	825
5	Kooshal Singh, Lumberdar, Poorundurpore	55	.....	10	10	45
6	Pahlwan Singh, Putteedar, Siryapore	600	48	86	134	466
7	Thakoor Singh, Lumberdar, Adholee	210	.....	.....	.....	210
8	Mahunund Putwaree, Jugutkhera ...	1,695	25	105	130	1,565
9	Zalim Singh	460	9	82	91	369
10	Churrun	358	45	.....	45	313
11	Seetaram	20	.....	.....	.....	20
12	Seetul	200	200	.....	200	.....
	Total ...	24,821	3,134	2,119	5,253	19,568

ANNEXURE D.

Detail of Advances given, &c., on other security than on Mahesh Buksh, Maipal Singh, and Boura Lodh.

No.	Name of Surety.	Name of Manufacturers who have received advance.	Tuccavee Advances.			Salt.			Remarks.
			Amount paid.	Amount realized.	Balance.	Quantity made.	Quantity sold.	Balance.	
			Rs. A. P.	Rs. A. P.	Rs. A. P.	M. S.	M. S.	M. S.	
1	Mahanund Putwaree, of Jugutkhera	Laoo Nareepore	80 0 0	5 0 0	75 0 0	57 20	15 15	42 5	Account up to 20th July 1870. Rampershad, Lodh of Juggutkhera.
2	Ditto	Kalee do.	85 0 0	.....	85 0 0	42 20	2 2	40 18	Ditto ... Bucha, Lodh of Juggutkhera, father of Kalee.
3	Ditto	Rampershad do.	80 0 0	.....	80 0 0	46 0	3 3	42 37	Ditto ... Ditto ditto.
4	Ditto	Reotee do.	80 0 0	15 0 0	65 0 0	34 0	.....	34 0	Ditto ... Thakur, Lodh of Juggutkhera.
5	Ditto	Dabee do.	80 0 0	2 0 0	78 0 0	23 0	5 5	17 35	Ditto ... Rampershad, Lodh of Juggutkhera.
6	Ditto	Bulda do.	60 0 0	.....	60 0 0	11 20	2 2	9 18	Ditto ... Dhunee, Lodh of Juggutkhera.
7	Ditto	Kashee do.	85 0 0	9 0 0	76 0 0	59 0	19 28	39 12	Ditto ... Bhola, Lodh of Juggutkhera.
8	Ditto	Ousari do.	80 0 0	1 0 0	79 0 0	36 10	11 37	24 13	Ditto ... {Ousari, son of Nunkee. Fukeera, Lodh of Utwut.
9	Ditto	Bhawani do.	65 0 0	.....	65 0 0	29 0	.....	29 0	Ditto ... Reotee, Lodh of Juggutkhera.
10	Ditto	Nundoah do.	85 0 0	3 0 0	82 0 0	46 0	10 25	35 15	Ditto ... Bhola, Lodh of Utwut.
11	Ditto	Khusial do.	80 0 0	38 0 0	42 0 0	43 0	.....	43 0	Ditto ... {Khusial, son of Nanhoo. Rampershad, Lodh of Juggutkhera.
12	Ditto	Seetul do.	65 0 0	2 0 0	63 0 0	102 20	40 16	62 4	Ditto ... Laoo, Lodh, Juggutkhera.
13	Ditto	Sewak do.	140 0 0	.....	140 0 0	32 6	2 22	29 24	Ditto ... Rampershad, Lodh of Juggutkhera.
14	Ditto	Gungabishen do.	70 0 0	.....	70 0 0	5 23	5 5	0 18	Ditto ... Kalee, Lodh of Juggutkhera.
15	Ditto	Khurgee do.	75 0 0	3 0 0	72 0 0	16 26	16 8	0 18	Ditto ... Rampershad, Lodh of Juggutkhera.
16	Ditto	Makhan do.	70 0 0	22 0 0	48 0 0	22 15	11 23	10 32	Ditto ... Bucha, Lodh of Juggutkhera.
17	Ditto	Ousari do.	70 0 0	2 0 0	68 0 0	14 1	14 1	.....	Ditto ... {Ousari, son of Mirai. Bhola, Lodh of Utwut.
18	Ditto	Goonwa do.	70 0 0	.....	70 0 0	60 37	11 17	49 20	Ditto ... Rampershad, Lodh of Juggutkhera.
19	Ditto	Mukna do.	70 0 0	.....	70 0 0	38 5	15 19	22 26	Ditto ... Cheetoo, Lodh of Utwut.
20	Ditto	Khusial do.	80 0 0	.....	80 0 0	.....	.....	.....	Ditto ... {Khusial, son of Motee. Bhola, Lodh, Utwut.
21	Ditto	Deeal do.	75 0 0	28 0 0	47 0 0	6 20	.....	6 20	Ditto ... Nunkooah, Lodh of Juggutkhera.
22	Ditto	Ousairi do.	50 0 0	.....	50 0 0	.....	.....	.....	Ditto ... {Ousairi, son of Mungly. Mahanund, of Juggutkhera.
		Total ...	1,695 0 0	130 0 0	1,565 0 0	726 23	186 28	539 35	

23	Golab Sing, of Village Punair ...	{Seetala & Behari ...}	Sahibgunge ...	100	0	0	30	0	0	70	0	0	94 30	90 5	4 25	Account up to 20th July 1870.
24	Ditto	Jugut Sing Karamtullia	...	200	0	0	.....			200	0	0	17 20	.....	17 20	Ditto.
25	Ditto	Jham Sing	do. ...	120	0	0	7	0	0	113	0	0	6 20	.....	6 20	Ditto.
26	Ditto	Guja Sing and Dowlut, of Puchbheeta	...	125	0	0	67	0	0	58	0	0	14 0	.....	14 0	Ditto.
27	Ditto	Seetal Sing	do. ...	60	0	0	.....			60	0	0	14 0	.....	14 0	Ditto.
28	Ditto	Narput Sing and Bahadur Sing,	do. ...	100	0	0	.....			100	0	0	.....	.....	.....	Ditto.
29	Ditto	Lall Bahadur,	do. ...	60	0	0	.....			60	0	0	.....	.....	.....	Ditto
30	Ditto	Muni Ram	do. ...	60	0	0	25	0	0	35	0	0	.....	.....	...	Ditto.
31	Ditto	Bujrug Sing and Chundee	do. ...	60	0	0	.....			60	0	0	.....	.....	.....	Ditto.
32	Ditto	Suthan, Booreehar	...	80	0	0	11	0	0	69	0	0	54 25	26 32	27 33	Ditto.
		TOTAL	...	965	0	0	140	0	0	825	0	0	201 15	116 37	84 18	
33	Pahlwan Sing, of Seryanpore ...	Sahibdeen Parwapore	...	60	0	0	12	0	0	48	0	0	270 6	222 35	47 11	Ditto.
		Maikoo	do. ...	60	0	0	35	0	6	25	0	0				
34	Ditto	Durjan Goolurria	...	60	0	0	46	0	0	14	0	0	248 20	72 31	175 29	Ditto.
		Buldeo	do. ...	60	0	0	5	0	0	55	0	0				
35	Ditto	Budla	do. ...	60	0	0	1	0	0	59	0	0	16 0	6 6	9 34	Ditto.
36	Ditto	Sookh Deen Sing	do. ...	120	0	0	.....			120	0	0	61 0	19 19	41 21	Ditto.
37	Ditto	Nunoah	do. ...	60	0	0	.....			60	0	0	.....	.....	... ..	Ditto.
38	Ditto	Sitabara	do. ...	60	0	0	35	0	0	25	0	0	45 30	19 39	25 31	Ditto.
39	Ditto	Khitair Sing	do. ..	60	0	0	.....			60	0	0	14 2	6 6	7 36	Ditto.
		TOTAL	...	600	0	0	134	0	0	466	0	0	655 18	347 16	308 2	
40	Thakur Singh, of Urhowlee ...	Jugut Sing, Sahibgunge	...	70	0	0	.....			70	0	0	1 0	.. ...	1 0	Ditto.
41	Ditto	Gujraj Sing	do. ...	70	0	0	.....			70	0	0	.....	.....	.....	Ditto.
42	Ditto	Dwarka Sing	do. ...	70	0	0	.....			70	0	0	0 20	.....	0 20	Ditto.
		TOTAL	...	210	0	0	.....			210	0	0	1 20	.....	1 20	
43	Churrun of Narainpore ...	Churrun	...	215	0	0	5	0	0	210	0	0	170 19	28 28	141 31	Account up to 20th July 1870. Churrun is a man of property; consequently, no security has been taken from him.
44	Ditto	Hunoman Narainpore	...	90	0	0	40	0	0	50	0	0	35 0	.....	35 0	Ditto.
45	Ditto	Behari	do. ..	.....			.....			.....			54 0	1 1	52 39	Ditto.
46	Ditto	Dingur	do. ...	.....			.....			.....			15 20	... ..	15 20	Ditto.
47	Ditto	Binda	do. ..	.....			.....			.....			91 20	26 26	64 34	Ditto.
48	Ditto	Cherounjoo	do. ...	.....			.....			.....			54 0	16 16	37 24	Ditto.
	Amount paid to Churrun to supply food to the men of Narainpore ...			53	0	0	.....			53	0	0	... ..	.....	.....	
		TOTAL	...	358	0	0	45	0	0	313	0	0	420 19	72 31	347 28	

ANNEXURE D.—(continued).

Detail of Advances given, &c., on other security than on Mahesh Buksh, Maipal Singh, and Boura Lodh,—(continued).

No.	Name of Surety.	Name of Manufacturers who have received advance.	Tuccavee Advances.			Salt.			Remarks.
			Amount paid.	Amount realized.	Balance.	Quantity made.	Quantity sold.	Balance.	
			Rs. A. P.	Rs. A. P.	Rs. A. P.	M. S.	M. S.	M. S.	
49	Khusial Sing and Thakoor Sing of Oonchwa	Thakoor Oonchwa ...	30 0 0	10 0 0	20 0 0	40 20	18 18	22 2	
50	Ditto	Budah do. ...	25 0 0	.. ...	25 0 0	45 20	.....	45 20	
		Total ...	55 0 0	10 0 0	45 0 0	86 0	18 18	67 22	
51	Zalim Sing of Jea Khera ...	Zalim Sing	460 0 0	91 0 0	369 0 0	98 26	19 9	79 17	The remark made against Churrun's (43) name applies to both these men.
52	Seetaram of Purwapore. Work in Oonchwa	Seetaram	20 0 0	.....	20 0 0	20 20	6 6	14 14	
		Total ...	480 0 0	91 0 0	389 0 0	119 6	25 15	93 31	
		Grand Total ...	4,363 0 0	550 0 0	3,813 0 0	2,210 21	767 25	1,442 36	

The 25th July 1870.

W. LYON,
In charge for Patrol, Mallowna.

OUDH AND JOUNPORE LOCAL SALT WORKS.

ANNEXURE E.

SECURITY FOR TUCCAVEE, DOWANAH SAHIBGUNGE.

1. Oosairee, &c., Rs. 325; surety, Maipal Singh.

2. Ram Buksh, Rs. 350; surety, Maipal Singh.

N. B.—With this man's bond is filed a surety bond for Rs. 500 from Juggut Singh of Pukkra Buzurg, for Rs. 500, but in name of Sooraj Buksh, son of Ram Buksh. On enquiry, I am told that Maipal Singh is security.

3. Seetul Lodh, Rs. 50; surety, Gopal Singh of Punaee B. Surety said to have been tested in a general list received from the Tehseeldar. In this list, he is described as capable of being responsible for Rs. 50. His share is said to be mortgaged.

4. Beharee Lodh, Rs. 50; surety, same Gopal Sing.

N. B.—Gopal Singh asserts in both his bonds, that his estate is not mortgaged.

5. Juggut Singh Bais, Rs. 100; surety, Thakoor Singh of Urhowlee.

6. Dwarka Singh Bais, Rs. 100; surety, Thakoor Singh of Urhowlee.

7. Gujraj Singh Bais, Rs. 100; surety, Thakoor Singh of Urhowlee.

N. B.—Thakoor Singh is stated by the Tehseel to be able to answer for Rs. 150, but his estate is mortgaged. Only Rs. 70 each were paid out on the above bonds. Mr. Hay states that the surety has houses, trees, cattle, &c., our hold on which is covered by the words "Jaedad Munkoola aur ghair Munkoola" in the bond.

KURUMTULLEEA.

1. Lulleye Lodh, Rs. 160; surety, Maipal Singh.

2. Moonna Nooneeah, Rs. 95; surety, Maipal Singh. Seetul Nooneeah, of Chupkaha, also stands security for Moonna. No reference to Tehseel.

3. Sheoraj Nooneeah, Rs. 180; sureties, Maipal Singh and Seetul Nooneeah, of Chupkaha.

4. Dulloo Nooneeah, Rs. 95; sureties, Maipal Singh and Seetul Nooneeah, of Chupkaha.

5. Sheonarain Brahmin, Rs. 125; sureties, Maipal Singh and Sudkoo Singh, of Kullianpoor, Pergunnah Patun, Oonao. No reference to Tehseel.

6. Soorujpurshad Kayath, Rs. 115; surety, Maipal Singh.

7. Debee Singh Bais, Rs. 60; surety, Golab Singh of Punaee B.

8. Jham Singh Bais, Rs. 60; surety, Golab Singh of Punaee B.

9. Jugut Singh Biseya, Rs. 200; surety, Golab Singh, of Punaee B. Maipal Singh has a factory on his own account in this Dowanah, in connection with which he has received an advance of Rs. 69.

PUCHBHEETA.

1. Turron Lodh, Rs. 60; surety, Bowra Lodh. Bowra is stated by the Tehseel to be worth, in connection with Suktoo, Rs. 1,000.

2. Gyadeen Lodh, Rs. 60; surety, Bowra.

3. Chutoora Lodh, Rs. 50; sureties, Maipal Singh and Mudaree Lodh, of Rampoor, Pergunnah Bhugwuntnugger, Zillah Oonao. Stated by Tehseel to be worth Rs. 25.

4. Mudaree Lodh, same as above Rs. 55; surety, Maipal Singh.

5. Mukkoo Lodh, Rs. 60; sureties Maipal Singh and Lulleye Lodh, of Dynta, Pergunnah Punaee, Zillah Oonao. No reference to Tehseel.

6. Dwarka Singh Bais, Rs. 50; sureties, Maipal Singh and Dirguj Singh, of Burgudda, Pergunnah Bhugwuntnugger, Zillah Oonao. Tehseel say he is worth 50; estate mortgaged.

7. Buchna and Bookun Lodhs, Rs. 50; sureties, Maipal Singh and Lulleye Lodh of Dynta.

8. Rughbur Brahmin, Rs. 100; no surety.

9. Deengoor Lodh, Rs. 65 and 24; sureties, Maipal Singh and Lulleye Lodh.

10. Deewan Lodh, Rs. 65; sureties, Maipal Singh and Lulleye Lodh.

11. Lalla Lodh, Rs. 90; sureties, Maipal Singh and Gungoo Lodh, of Maharajpoor, Pergunnah Puneea, Oonao. No reference to Tehseel.

12. Pirthee Singh Bais and Gopal Brahmin, Rs. 150; sureties, Chundka Buksh Bais, Uturher, Pergunnah Kheeroon, Roy Bareilly, and Maipal Singh.

13. Ramadhar and Ramjee Aurin Kayath, Rs. 140; surety, Maipal Singh.

14. Gujja Singh Bais and Doulut Misr, Brahmin, Rs. 125; surety, Golab Singh (V. S.)

15. Seetul Singh Bais, Rs. 60; surety, Golab Singh (V. S.)

16. Maipal Singh Bais; Rs. 60; surety, Dirguj Singh (V. S.) with Maipal Singh.

17. Munna Lodh, Rs. 12; surety, Gungoo Lodh, of Maharajpoor, with Maipal Singh.

18. Nirput Singh Bais and Pahlwan Singh Chowan, Rs. 100 surety, Golab Singh (V.S.)

19. Ashurfee Lal Kyath, Rs. 100; surety, Maipal Singh.

20. Lal Bahadoor Singh Bais, Rs. 60; surety, Golab Singh (V.S.)

21. Munnee Ram Brahmin, Rs. 60; surety, Goolab Singh (V.S.)

22. Bujrung Singh Bais and Chundee Lodh, Rs. 60; surety, Goolab Singh (V. S.)

JEEA KHERA.

1. Gehuwa Bikharee Nooneeah, Rs. 70; surety, Muhesh Buksh. Tested from Tehseel as worth Rs. 5,000.

2. Kashee and Gungoon Lodhs, Rs. 70; surety, ditto.

3. Cheeloo and Mukooa Lodhs, Rs. 70; surety, ditto.

4. Ouseree Maipal, &c., Lodhs, Rs. 70; surety, ditto.

5. Buldee and Seetulooa Lodhs, Rs. 70; surety, ditto.

6. Gungadeen Doorga, &c., Lodhs, Rs. 70; surety, ditto.

7. Bhowanee Lodh, Rs. 70; surety, ditto.

8. Seetul Lodh, Rs. 70; surety, ditto.

OUDH AND JOUNPORE LOCAL SALT WORKS.

9. Dyal and Chinno Lodh, Rs. 70; surety, Muhesh Buksh.

10. Punchum Nooneeah, Rs. 130; surety, ditto.

11. Muttoora Misr, Rs. 140; surety, ditto.

12. Kampta Bunneah, Rs. 140; surety, ditto.

13. Gungadeen and Budul Nooneeahs, Rs. 70; surety, ditto.

14. Becha and Ram Buksh Nooneeahs, Rs. 70; surety, ditto.

15. Zalim Singh Chowhan, Rs. 470; no sureties. Own recognizance.

16. Muhesh Buksh for miscellaneous distribution, Rs. 175, on own recognizance.

BELASPOOR.

1. Muttarooa and Dyal Lodh, Rs. 60; sureties, Bowra and Lucktoo.

2. Ramdeen Bukshee, &c., Lodhs, Rs. 50; sureties, Bowra and Lucktoo.

3. Doorga and Gungooa Lodhs, Rs. 60; sureties, Bowra and Lucktoo.

4. Chundee and Sookhee, &c., Lodhs, Rs. 60; sureties, Bowra and Lucktoo.

5. Sheodeen, Lodh, Rs. 60; sureties, Bowra and Lucktoo.

6. Lallooa and Mungnee, Aheers, Rs. 60; sureties, Bowra and Lucktoo.

7. Poorun and Ramdeen Lodhs, Rs. 60; sureties, Bowra and Lucktoo.

8. Kampta Lodh, Rs. 60; sureties, Bowra and Lucktoo.

9. Buchoo Lodh, Rs. 60; sureties, Bowra and Lucktoo.

10. Goordeen and Deena Lodhs, Rs. 55; sureties, Bowra and Lucktoo.

11. Goordeen Lodh, Rs. 55; sureties, Bowra and Luctoo.

12. Khooshyal and Bechoo Lodhs, Rs. 55; sureties, Bowra and Lucktoo.

13. Munneer Aheer, Rs. 50; sureties, Bowra and Luctoo.

14. Dhoukul Lodh, Rs. 50; sureties, Bowra and Lucktoo.

15. Motee and Purshun Lodhs, Rs. 60; sureties, Bowra and Lucktoo.

16. Bowra, Rs. 55, for miscellaneous, on his own recognizance.

BHOOREEHAR.

1. Sookha and Koilee Lodhs, Rs. 130; surety, Maipal Singh.

2. Lala and Sookha Lodhs, Rs. 75; surety, Maipal Singh.

3. Risal and Budul Lodhs, Rs. 110; sureties, Maipal Singh and Goonoo Lodh, of Bhogeyta, Pergunnah Muggrayer, Oonao. Tested from Tehseel as worth Rs. 25.

4. Lookhye Lodh, Rs. 70; sureties, Maipal Singh and Koilee Lodh. No reference.

5. Sudhun Lodh, Rs. 80; surety, Goolab Singh (V. S.)

6. Goonoo Lodh, Rs. 65; surety, Maipal Singh.

7. Muteyee Lodh, Rs. 65; sureties, Maipal Singh and Goonnoo Lodh (V. S., No. 3.)

OUDH AND JOUNPORE LOCAL SALT WORKS.

8. Muckkoo Lodh, Rs. 50; sureties, Maipal Singh and Lala Chowkeedar, of Mullowna, declared by Tehseel not worth more than Rs. 25.

9. Bhola Lodh, Rs. 50; sureties, Maipal Singh and Goonoo Lodh (V. S., No. 3.)

10. Buldee Lodh, Rs. 50; surety, Maipal Singh Burmadeen, Brahmin, of Sehla, Pergunnah Behar, Oonao. Tested by Tehseel as worth Rs. 50.

11. Gungadeen Brahmin, Rs. 40; surety, Maipal.

12. Kalka Lodh, Rs. 50; sureties, Maipal and Burmadeen (V. S., No. 10.)

13. Matadeen Lodh, Rs. 60; sureties, Maipal and Rughbur, Brahmin, of Sehla, Pergunnah Berar, Oonao. Tested by Tehseel as worth Rs. 50.

14. Lullooa Lodh, Rs. 65; sureties, Maipal Singh and Goonoo Lodh (V. S., No. 3.)

15. Sheodeen Lodh, Rs. 60; sureties, Maipal Singh and Lokhyee Lodh, of Rakkapore, of Azumpoor, Pergunnah Behar, Oonao. No reference.

16. Poolooa Lodh, Rs. 50; sureties, Maipal Singh and Muttoora Brahmin, of Kullianpore, Pergunnah Patun, Oonao. No reference.

17. Khemna Lodh, Rs. 50; sureties, Maipal Singh and Koilee Lodh, Maharajpoor, Pergunnah Punyha, Oonao. No references.

NAREEPAR.

1. Mykoo Lodh, Rs. 45; surety, Maipal Singh and Dhumow Lodh, of Bulsingh Khera, Pergunnah Punyha, Oonao. Tested by Tehseel for Rs. 50.

2. Chirunjoo Lodh, Rs. 45; sureties, Maipal Singh and Dhumow Lodh, of Bulsingh Khera, Pergunnah Punyha, Oonao. Tested by Tehseel for Rs. 50.

3. Dhunoo Lodh, Rs. 66; surety, Maipal Singh.

4. Henma Lodh, Rs. 40; surety, Maipal Singh.

5. Thakoor Lodh, Rs. 66; sureties, Maipal Singh and Dhunoo (V. S., No. 1.)

6. Bhowanee Lodh, Rs. 48; surety, Maipal Singh.

7. Thakoor Lodh, Rs. 35; surety, Maipal Singh.

8. Buchna Lodh, Rs. 50; surety, Maipal Singh.

9. Koomar Singh Bais, Rs. 65; surety, Maipal Singh.

10. Bijan Singh Bais, Rs. 50; surety, Maipal Singh.

11. Deena Singh Bais, Rs. 65; surety, Maipal Singh.

12. Bhola Lodh, Rs. 50; surety, Maipal Singh.

13. Bharut Singh Bais, Rs. 48; surety, Maipal Singh.

14. Chooron Lodh, Rs. 50; surety, Maipal Singh.

15. Lala Lodh, Rs. 60; sureties, Maipal Singh and Dhunon.

16. Madho and Guneshee Lodh, Rs. 90; sureties, Maipal and Kazim Ali, of Kusrour, Pergunnah Poorwa, Oonao. No reference to Tehseel.

17. Bhowanee Lodh, Rs. 120; sureties, Maipal Singh and Thakoor Lodh, of Richpal Khera of Mullowna. Tested by Tehseel as worth Rs. 100.

OUDH AND JOUNPORE LOCAL SALT WORKS.

18. Jodha Lodh, Rs. 45; sureties, Maipal Singh and Bhowanee Lodh, of Lala Khera, Pergunnah Behar, Oonao, tested by Tehseel as worth Rs. 25.

19. Puhar Singh Bais, Rs. 100; surety, Maipal Singh.

20. Gokool Singh Chowhan, Rs. 50; surety, Maipal Singh.

21. Gyadeen Brahmin, Rs. 50; surety, Maipal Singh.

22. Sookoorwa Lodh, Rs. 50; sureties, Maipal and Gakool Singh, Brahmin, of Semree, Pergunnah Kheeron, Roy Bareilly. No reference.

23. Budulwa Koomar, Rs. 40; sureties, Maipal Singh and Bhowanee Lodh (V. S., No. 18).

24. Nidhan Lodh, Rs. 45; sureties, Maipal Singh and Bhowanee Lodh (V. S., No. 18).

25. Jeurakhur Nooneeah, Rs. 40; sureties, Maipal Singh and Ram Suhai Brahmin, of Nowkhera, Pergunnah Kheeron, Roy Bareilly. No reference.

26. Budul Lodh, Rs. 50; sureties, Maipal Singh and Bhola Lodh, of Bulsingh Khera. No reference.

27. Sookheejee Lodh, Rs. 50; surety, Muhesh Buksh.

28. Dumra Lodh, Rs. 60; surety, Muhesh Buksh.

29. Kashee Lodh, Rs. 140; surety, Muhesh Buksh.

30. Adheen Singh Bais, Rs. 120; surety, Muhesh Buksh.

31. Laoo Lodh, Rs. 80; surety, Rampershad Lodh, of Juggut Khera, Pergunnah Muggurayr, Oonao. Money paid through Maha Nund, Putwaree of Juggut Khera, who has filed no security, but given receipts, filed with Cash Account. Aman Singh describes Rampershad as a tenant paying Rs. 66 land revenue, which is realized on the estate. He has two bullocks worth Rs. 15. Knows not what property he may have inside his house.

32. Kalee Lodh, Rs. 85; surety, Bucha Lodh, son of Kashee, of Juggut Khera, brought by Mahanund (V. S.) describes (Kashee) as paying Rs. 13-9 revenue, realized at harvest. Has two bullocks worth Rs. 20.

33. Rampershad Lodh, Rs. 80; surety, Bucha (V. S.).

34. Bulda Lodh, Rs. 60; surety, Debee Lodh of Juggut Khera, through Mahanund. Described as paying Rs. 15, revenue realized on crops.

35. Reotee Lodh, Rs. 80; surety, Thakoor Lodh, through Mahanund. Not traceable in list from Zillahdars.

36. Debee Lodh, Rs. 80; through Mahanund; surety, Rampershad (V. S., No. 31).

37. Kashee Lodh, Rs. 85; surety, through Mahanund Bhola, son of Lula, of Utwut, Pergunnah Muggurayr, Oonao. Described as paying revenue Rs. 5, realized from crops. Has a grove of four beegahs.

38. Ouseree Lodh, Rs. 80, through Mahanund; surety, Fukeera Lodh, of Utwut. Pays Rs. 27-4 revenue. Has four bullocks worth Rs. 30.

39. Bhowanee Lodh, Rs. 65, through Mahanund; surety, Reotee Lodh, of Juggut Khera, pays Rs. 11 revenue, realized from crops.

40. Murdooa Lodh, Rs. 85, through Mahanund; surety, Bhola, son of Ghureeb, of Utwut. No property traced.

41. Khooshyal Lodh, Rs. 80, through Mahanund and Rampershad (V. S., No 31).

42. Seetul Lodh, Rs. 65, through Mahanund and Laoo Lodh, of Juggut Khera. Not traceable for property.

43. Sewuk Lodh, Rs. 110, through Mahanund; sureties Rampershad (V. S., No. 31) and Bucha Lodh, of Juggut Khera (V. S., No. 32).

44. Gungabishun Lodh, Rs. 70, through Mahanund; surety, Kalee Lodh, of Juggut Khera. Described as paying Rs. 58 revenue. Has bullocks worth Rs. 40, and a grove and a house.

45. Khurghe Lodh, Rs. 75, through Mahanund; surety, Rampershad (V. S., No. 31).

46. Mukhuna Lodh, Rs. 70, through Mahanund; sureties, Bucha (V. S., No. 32) and Rampershad (V. S., No. 31).

47. Ouseree Lodh, son of Mireyee, Rs. 70, per Mahanund; surety, Bhola, son of Lala (V. S., No. 37).

48. Nokhooa Lodh, Rs. 70, per Mahanund; surety, Rampershad (V. S., No. 31).

49. Mukuna, son of Nunke Lodh, Rs. 70, per Mahanund; surety, Chuttoo Lodh, of Utwut. Possesses a grove of four beegahs. Mukuna pays revenue of Rs. 45 realized from crops. Has a bullock and a buffalo worth Rs. 10.

50. Khoosal Lodh, Rs. 80, per Mahanund; surety, Bhola (V. S., No. 37).

51. Dyal Lodh, Rs. 75, per Mahanund; surety, Nukooa Lodh. Pays Rs. 15-4 revenue realized from crops. Has no other property.

52. Ouseree, son of Bikharee Lodh, Rs. 50, per Mahanund, who is surety. No property traced.

CHUPKAHA.

1. Purshun Nooneeah, Rs. 60; surety, Maipal Singh.
2. Bukhtawur Nooneeah, Rs. 164; surety, Maipal Singh.
3. Kampta Nooneeah, Rs. 50; surety Maipal Singh.
4. Ramdeen Nooneeah, Rs. 70; surety, Maipal Singh.
5. Seetul Nooneeah, Rs. 70; surety, Maipal Singh.
6. Lala Nooneeah, Rs. 60; surety, Maipal Singh.
7. Hunooman Nooneeah, Rs. 70; sureties, Maipal Singh and Gunesh Nooneeah, of Goolureea. No reference.
8. Seetul, son of Chega Nooneeah, Rs. 150; surety, Maipal Singh.
9. Sutnarain Bais, Rs. 120; surety, Maipal Singh.
10. Bodhee and Kaloo Nooneeahs, Rs. 120; sureties, Maipal Singh and Seetul (V. S., No. 8). No property traced.
11. Holbul Nooneeah, Rs. 73; sureties, Maipal Singh and Seetul (V. S., No. 8).
12. Gungadeen Nooneeah, Rs. 72; sureties, Maipal Singh and Seetul (V. S.)
13. Chinta Nooneeah, Rs. 70; Maipal Singh and Seetul (V. S., No. 8).
14. Gunesh Nooneeah, Rs. 50; surety, Maipal Singh.
15. Roshun Singh Bais, Rs. 74; surety, Maipal Singh.

OUDH AND JOUNPORE LOCAL SALT WORKS.

16. Oree Nooneeah, Rs. 70; sureties, Maipal Singh and Purshun Nooneeah, of Purwapoor. No property traced.

17. Rughoo Nooneeah, Rs. 70; sureties, Maipal Singh and Purshun, of Purwapoor (V. S., No. 8).

18. Binda Nooneeah, Rs. 140; sureties, Maipal Singh and Gunesh Nooneeah, of Goolurrea. No property traced.

19. Buchoo Nooneeah, Rs. 140; sureties, Maipal Singh and Gunesh Nooneeah, of Goolureea.

20. Gunnesh, son of Busawun Nooneeah, Rs. 70; sureties, Maipal Singh and Seetul son of Sheodeen Nooneeah of Purwapoor. No property traced.

21. Doorga Nooneeah; Rs. 70; surety, Maipal Singh.

22. Lala Nooneeah, Rs. 60; sureties, Maipal Singh and Seetul (V. S., Nos. 8 and 10).

23. Seetul, son of Goolzar Nooneeah, Rs. 60; sureties, Maipal Singh and Seetul (V. S., Nos. 8 and 10).

24. Gokool Nooneeah, Rs. 60; sureties, Maipal Singh and Seetul (V. S., Nos. 8 and 10).

25. Budul Nooneeah, Rs. 70; sureties Maipal Singh and Seetul (V. S., Nos. 8 and 10).

26. Matabadul Nooneeah, Rs. 63; surety, Maipal Singh.

27. Jeea Lal Nooneeah, Rs. 50; sureties, Maipal Singh and Seetul, son of Sheodeen of Purwapoor. No property traced.

28. Gunnesh, son of Bhodee Nooneeah, Rs. 70; surety, Maipal Singh.

29. Ramdeen Nooneeah, Rs. 60; sureties, Maipal Singh and Seetul, son of Chegu. No property traced.

PARWAPOOR.

1. Gunnesh Nooneeah, Rs. 70; surety, Maipal Singh.

2. Reotee Nooneeah, Rs. 200; surety, Maipal Singh.

3. Oree Nooneeah, Rs. 145; sureties, Maipal Singh and Seetul, son of Chegu. No property traced.

4. Lala, son of Nohuri Nooneeah, Rs. 60; sureties, Maipal Singh and Oree Nooneeah.

5. Jookhoo, son of Nohuri Nooneeah, Rs. 60; sureties, Maipal Singh and Oree Nooneeah.

6. Lala, son of Jhaur Nooneeah, Rs. 60; sureties, Maipal Singh and Doorbil Singh of Bijowra, Behar, Oonao. Seems to be reported from Tehseel under name of Durshun Singh, as worth Rs. 50.

7. Buchoo Nooneeah, Rs. 70; sureties, Maipal Singh and Ramdeen Nooneeah.

8. Doorga Nooneeah, Rs. 90; sureties, Maipal Singh and Reotee Nooneeah.

9. Puryag Nooneeah, Rs. 90; sureties, Maipal Singh and Bukhtawur Nooneeah.

10. Futteh Nooneeah, Rs. 80; sureties, Maipal Singh and Purshun Nooneeah.

11. Sahibdeen Nooneeah, Rs. 60; surety, Puhlwan Singh Bais, of Siriapoor, Behar, Oonao. Reported as worth Rs. 100.

12. Lala, son of Budul Nooneeah, Rs. 100; sureties, Maipal Singh and Jewrakhun Nooneeah.

OUDH AND JOUNPORE LOCAL SALT WORKS.

13. Jokhoo Nooneeah, Rs. 60; sureties, Maipal Singh and Seetul Nooneeah.

14. Oodwut Nooneeah, Rs. 100; sureties, Maipal Singh and Reotee Nooneah.

15. Heera Nooneeah, Rs. 110; sureties, Maipal Singh and Bukhtawur Nooneeah.

16. Busawun Nooneeah, Rs. 110; sureties, Maipal Singh and Bukhtawur Nooneeah.

17. Doorga Nooneeah, Rs. 200; sureties, Maipal Singh and Bukhtawur Nooneeah.

18. Budlee Nooneeah, Rs. 80; sureties, Maipal Singh and Jokhun Nooneeah.

19. Jokhoo, son of Jhugroo, Rs. 70; sureties, Maipal Singh and Jokhun Nooneeah.

20. Lahouree Nooneeah, Rs. 60; sureties, Maipal Singh and Seetul Nooneeah.

21. Mereyee Nooneeah, Rs. 60; sureties, Maipal Singh and Seetul Nooneeah.

22. Chutta Nooneeah, Rs. 120; sureties, Maipal Singh and Seetul Nooneeah.

23. Dowlut Nooneeah, Rs. 70; sureties, Maipal Singh and Lala Nooneeah.

24. Sookha Nooneeah, Rs. 100; sureties, Maipal Singh and Budalee Nooneeah.

25. Hoolasee Nooneah, Rs 70; sureties, Maipal Singh and Seetul Nooneeah.

26. Muhungoo Nooneeah, Rs. 60; sureties, Puhlwan Singh (V. S., No. 11).

27. Kumpta Nooneeah, Rs. 70; sureties, Maipal Singh and Purshun Nooneeah (V. S, No. 10).

GOOLUREEA.

1. Bhodee Nooneeah, Rs. 80; surety, Maipal Singh.
2. Jokhun Nooneeah, Rs. 100; surety, Maipal Singh.
3. Byjoo Nooneeah, Rs. 90; surety, Maipal Singh.
4. Parum Sookh Nooneeah, Rs. 60; surety, Maipal Singh.
5. Gunesh Nooneeah, Rs. 75; surety, Maipal Singh.
6. Odee Nooneeah, Rs. 60; surety, Maipal Singh.
7. Lowwa Lodh, Rs. 60; surety, Maipal Singh.
8. Thakoor Lodh, Rs. 50; surety, Maipal Singh.
9. Laoo Bukhtawur, &c., Lodh, Rs. 110; surety, Maipal Singh.
10. Thanoo and Madaree Lodh, Rs. 60; surety, Maipal Singh.
11. Dheywa Lodh, Rs. 60; surety, Maipal Singh.
12. Keseyree Nooneeah, Rs. 74; surety, Maipal Singh.
13. Thakoor Lodh, Rs. 60; sureties, Maipal Singh and Bhola Lodh, of Pursura, Pergunnah Punhun, Oonao. No reference.
14. Ramdass Nooneeah, Rs. 70; surety, Maipal Singh.
15. Khoshyal Nooneeah, Rs. 60; sureties, Maipal Singh and Jokhoo Nooneeah, of Sheobuksh Khera. No reference.

OUDH AND JOUNPORE LOCAL SALT WORKS.

16. Budul Nooneeah, Rs. 60; sureties, Maipal Singh and Jokhoo Nooneeah, of Sheobuksh Khera. No reference.

17. Bheeka Nooneeah, Rs. 60; sureties, Maipal Singh and Jokhoo Nooneeah, of Sheobuksh Khera. No reference.

18. Purshad Nooneeah, Rs. 115; sureties, Maipal Singh and Gunnesh Nooneeah, of Goolureea. No reference.

19. Dhowkul Nooneeah, Rs. 100; sureties, Maipal Singh and Boodhee Nooneeah. On reference, is declared worth Rs. 100.

20. Ramdeen Nooneah, Rs. 70; sureties, Maipal Singh and Boodhee Nooneeah. On reference, is declared worth Rs. 100.

21. Bhola Nooneeah, Rs. 86; sureties, Maipal Singh and Jokhun Nooneeah, of Nibheea Pergunnah Punhun, Oonao. No reference.

22. Sheopershad Nooneeah, Rs. 70; sureties, Maipal Singh and Jokhun Nooneeah, of Nibheea, Pergunnah Punhun, Oonao. No. reference.

23. Jokhun Nooneeah, Rs. 145; surety, Maipal Singh.

24. Oree Nooneeah, Rs. 70; sureties, Maipal Singh and Gunesh (V. S., No. 18.)

25. Debee Nooneeah, Rs. 170; sureties Maipal Singh and Dewhul Singh Bais, of Bijoura, Behar, Oonao (V. Purwapoor, No. 6.)

26. Jokhun and Ramdeen, son of Jham Nooneeah, Rs. 62; surety Maipal Singh.

27. Jewrakhun Nooneeah, Rs. 50; surety, Maipal Singh.

28. Bhola and Ramdeen, son of Boodee Nooneeah, Rs. 120; surety, Maipal Singh.

29. Pubboo Nooneeah, Rs. 70; surety, Maipal Singh.

30. Binda Nooneeah, Rs. 70; surety, Maipal Singh.

31. Lala Nooneeah, Rs. 70; surety, Maipal Singh.

32 Gungadeen Nooneeah, Rs. 70; sureties, Maipal Singh and Lala Nooneeah, of Lukhmudeh, Pergunnah Poorwa, Oonao. No. reference.

33. Goorbuksh Nooneeah, Rs. 80; sureties, Maipal Singh and Lala Nooneeah, of Lukhmudeh, Pergunnah Poorwa, Oonao. No reference.

34. Binda and Sheopershad, Rs. 120; sureties, Maipal Singh and Jokhun (V. S. No. 21.)

35. Doorjun Nooneeah, Rs. 60; surety, Puhlwan Singh, Chuttree of Sirreyapoor, Pergunnah Behar, Oonao. Declared worth Rs. 100 (V. S., Purwapore, Nos. 11 and 26.)

36. Buldeo Nooneeah, Rs. 60; surety, Puhlwan Singh Chuttree, of Sirreyapoor, Pergunnah Behar, Oonao. Declared worth Rs. 100 (V. S., Purwapore, Nos. 11 and 26.)

37. Budla Aheer, Rs. 60; surety, Puhlwan Singh Chuttree, of Sirreyapoor, Pergunnah Behar, Oonao. Declared worth Rs. 100 (V. S., Purwapore, Nos. 11 and 26.)

38. Ajrail Nooneeah, Rs. 80; sureties, Maipal Singh and Lala Nooneeah (V. S., No. 32.)

39. Gunga Nooneeah, Rs. 65; sureties, Maipal Singh and Purshun Nooneeah (V. Purwapoor, No. 27.)

40. Kaloo Nooneeah, Rs. 55; sureties, Maipal Singh and Purshun Nooneeah (V. Purwapoor, No. 27.)

41. Lala, son of Man Nooneeah, Rs. 60; sureties, Maipal Singh and Seetul, son of Chigu.

42. Lala Singh Bais, Rs. 88; sureties, Maipal Singh and Seetul, son of Chigu.

43. Gooroo Nooneeah, Rs. 50; sureties, Maipal Singh and Surubjeet Singh Bais, of Hummeerpore, Pergunnah Behar, Oonao. Tested for Rs. 75.

44. Gunga, son of Sheobuksh Nooneeah, Rs. 50; sureties, Maipal Singh and Surubjeet Singh Bais, of Hummeerpore, Pergunnah Behar, Oonao. Tested for Rs. 75.

45. Budul Nooneeah, Rs. 98; sureties, Maipal Singh and Doorbul Singh (V. S., No. 25.)

46. Doorga Nooneeah, Rs. 50; surety, Maipal Singh.

47. Sookdeen Singh Chuttree, Rs. 120; surety, Puhlwan Singh (V. S., No. 35.)

48. Mundwa Lodh, Rs. 60; surety, Puhlwan Singh (V. S., No. 35.)

49. Buchoo Brahmin, Rs. 70; surety, Maipal Singh.

50. Debee Gholam Brahmin, Rs. 242; surety, Maipal Singh.

51. Rambuksh Nooneeah, Rs. 50; sureties, Maipal Singh and Ramdass Nooneeah, of Sheobuksh Khera, Pergunnah Punhun, Oonao. Tested for Rs. 15.

52. Hunnooman Nooneeah, Rs. 80; sureties, Maipal Singh and Ramdass Nooneeah, of Sheobuksh Khera, Pergunnah Punhun, Oonao. Tested for Rs. 15.

53. Jeea Lall Nooneeah, Rs. 60; surety, Maipal Singh and Gunesh, son of Boodee Nooneeah, of Goolureea. No reference.

54. Budul Nooneeah, Rs. 60; sureties, Maipal Singh and Doorbul Singh (V. S., No. 25.)

55. Bikharee Nooneeah, Rs. 50; sureties, Maipal Singh and Budlee Nooneeah, of Banpoora, Pergunnah Mowrawun, Oonao. No reference.

56. Shitab Rae Kayath, Rs. 60; surety, Puhlwan Singh (V. S., No. 35.)

57. Gunga Nooneeah, Rs. 71; surety, Maipal Singh.

58. Kaloo Nooneeah, Rs. 60; sureties, Maipal Singh and Lala, son of Doorga Nooneeah, of Sheobuksh Khera, Pergunnah Punhun, Oonao. No reference.

59. Lala, son of Doorga, Rs. 130; surety, Maipal Singh.

60. Thakoor Nooneeah, Rs. 60; sureties, Maipal Singh and Seetul, son of Shewdeen Nooneeah, of Purwapoor. No reference.

61. Bheiron Nooneeah, Rs. 60; sureties, Maipal Singh and Boodee, son of Jurriur (V. S., No. 19.)

62. Buchoo and Mulwa Lodhs, Rs. 60; sureties, Maipal Singh and Doorbul Singh (V. S., No. 25.)

63. Punchum Nooneeah, Rs. 60; sureties, Maipal Singh and Doorbul Singh.

64. Bhagoo Nooneeah, Rs. 60; sureties, Maipal Singh and Doorbul Singh.

65. Motee Nooneeah, Rs. 70; sureties, Maipal Singh and Gunesh (V. S., No. 53.)

OUDH AND JOUNPORE LOCAL SALT WORKS.

66. Budlee Nooneeah, Rs. 50; sureties, Maipal Singh and Gunesh (V. S., No. 53.)

67. Budlee Kayath, Rs. 60; sureties, Maipal Singh and Seetul Purshad, of Akumpoor, Pergunnah Behar, Oonao (realized.)

68. Luckoo Nooneeah, Rs. 60; sureties, Maipal Singh and Ram Dass Nooneeah (V. S., No. 51.)

69. Chutta Nooneeah, Rs. 70; sureties, Maipal Singh and Debeedeen, son of Budloo Nooneeah, of Goolureea. No reference.

70. Munna Nooneeah, Rs. 60; sureties, Maipal Singh and Seetul, son of Chegu.

71. Gunesh Nooneeah, Rs. 60; sureties, Maipal Singh and Lala, son of Bore, of Luckmuddee Mow (V. S., No. 32.)

72. Mireyee Nooneeah, Rs. 60; sureties, Maipal Singh and Jokhun, son of Mireyee Nooneeah, of Sheobuksh Khera (V. S., No. 16.)

73. Gungadeen Nooneeah, Rs. 70; sureties, Maipal Singh and Ram Dass (V. S., No. 51.)

74. Bodee Nooneeah, Rs. 120; sureties, Maipal Singh and Bukhtawur (V., Purwapoor, Nos. 16 and 17.)

75. Khiteyee Singh Thakoor, Rs. 60; surety, Puhlwan Singh (V. S., No. 25.)

NARAINPOOR.

1. Dooluwa Lodh, Rs. 50; sureties, Maipal Singh and Khooshyal Lodh, of Pursurra, Pergunnah Punhun, Oonao. No reference.

2. Khooshyal Lodh (V. S., No. 1.) Rs. 70; surety, Maipal Singh.

3. Bhowanee Lodh, Rs. 67; sureties, Maipal Singh and Khoshyal (V., No. 1.)

4. Churun Nooneeah, Rs. 215; own recognizance. Rs. 5 recovered.

5. Hunooman, son of Gunga Nooneeah, Rs. 90; surety, Churun (V., No. 4.)

OONCHWA.

1. Budul and Bhowan Lodhs, Rs. 25; sureties, Khooshal Singh and Thakoor Singh of Poorundurpoor, Pergunnah Punhun, Oonao, lumberdars. No reference.

2. Thakoor Lodh, Rs. 30; sureties, Khooshal Singh and Thakoor Singh, of Poorundurpoor, Pergunnah Punhun, Oonao, lumberdars. No reference.

3. Seeta Ram Brahmin, Rs. 20; own recognizance.

MISCELLANEOUS.

Rs. 2,411 to Maipal Singh to be realized as salt is sold. No bond.

Churun Nooneeah, of Narainpoor, Rs. 53; to Maipal Singh, to be realized as salt is sold. No bond.

Seetul Nooneeah, Rs. 200 (recovered), to get men in.

ANNEXURE F.

Dr. *Abstract of Receipts and Disbursements from commencement of work to 30th June* 1870. *Cr.*

	Rs.	As.	P.	Rs.	As.	P.		Rs.	As.	P.	Rs.	As.	P.
Received from Treasury on account of Tuccavee*	26,000	0	0				Tuccavee distributed	24,821	0	0			
				26,000	0	0					24,821	0	0
„ „ Buildings†	3,000	0	0				Buildings, *i. e.*, house, offices, &c.	1,971	7	0			
				3,000	0	0	Boundary wall and gates, &c.	3,154	14	0			
Duty on Salt	28,093	9	2				Enclosure and ditch round Store-pits	50	7	9			
Royalty	585	4	7				Roads, &c.	146	4	3			
Cess for cost of Establishment	585	4	7				Construction of 12 guard posts	18	6	0			
				29,264	2	4	Experimental Salt Work	1,197	12	0			
Tuccavee received	3,134	0	0								6,539	3	0
				3,134	0	0	Pay of Establishment	3,771	15	6			
Pay of Establishment	3,771	15	6				Contingencies...	279	2	5			
Contingencies...	279	2	5								4,051	1	11
				4,051	1	11	Payments to Treasuries	29,264	2	4			
											29,264	2	4
Total	.....			65,449	4	3	Total	.....			64,675	7	3
							Balance	....			‡773	13	0
GRAND TOTAL	.....			65,449	4	3	GRAND TOTAL	.....			65,449	4	3

* Sum sanctioned ... ... Rs. 35,000
† Ditto ... ... „ 3,000
‡ The balance is from the Tuccavee Account, and the whole of this amount was returned to the Treasury in the following month.

NOTE ON THE KUROUR SALT WORKS.

Note on the Kurour Salt Works.

1. These are situated in pergunnah Moongra, of Jounpoor, on lands belonging to five villages, *viz.*, Muraon, Kurour, Muhendroo, Chitaon, and Tigra. Muraon is said to produce the best salt: the quality of the produce of the others following the order in which the names are ranged. Site of works.

2. The lands have been enclosed by a triple row of stakes, filled in with brush-wood, about eight feet in height and $2\frac{1}{2}$ in breadth. The enclosure, which is about $1\frac{1}{2}$ miles long, by one wide, forms an irregular pentagon. How enclosed.

3. The space enclosed *is said* to be capable, if fully worked, of turning out from two to two and a half lakhs of maunds of edible salt, and, with these, from one to one and a quarter lakhs of maunds of sulphate of soda. Estimated out-turn.

4. The process by which these substances are made is the common "Seenchan" or irrigation method. Process of manufacture.

5. The tract is thickly dotted with low mounds, remains of ancient works, and, seen from the only high ground in the neighbourhood, it conveys the idea of raviny, undulating ground. It is, however, in reality, simply a low-lying plot on which these hummocks have gathered in course of years as saline manufactures went on; and it labors under the disadvantage of being exactly the centre towards which the drainage of a considerable area gravitates, so that, from the time the periodical rains set in, until the cold season is somewhat advanced, it is usually well under water. At the time of my visit (August) it was completely flooded, and in the south-eastern corner, in a space known as the "Chândâ," the water was said to be beyond a man's depth.* Physical configuration of tract;

6. This tendency to flooding, by the obstacle which it opposes to intramural storage, is a very serious disadvantage; either the produce must be sold off before the rains set in (practically an impossibility), or it must be stored outside the enclosure. There is no suitable space immediately outside, where the land is a mere rice swamp, the nearest available place being the rising ground upon which we have built a house, and where we may readily store in pits any quantity of salt which we are likely to see made. But this site is about a mile from the exit gate of the enclosure, and there is the cost of carriage to the owners, and that of safe custody to the department, to be considered. As far as our present experience goes, the former is likely to run about five pies per maund, the latter, involving as it will the drawing upon our local establishment during the working season for a double guard, is rather a serious hindrance, from which, however, no escape is possible. By common consent of all experts, storage within the enclosure is not to be thought of, pits dug there even on the mounds, would, it is asserted, be flooded. During the rains *our* difficulty would be over, for, with nothing within the barriers with watch over which we need concern ourselves, it would be easy to concentrate our force on the ground where we had an interest at stake. The end will be that we shall have another enclosure to build round what will be our storage ground. which has a tendency to flood during the rains.

7. In byegone times this difficulty was not felt The produce of the tract was in demand; most of it sold as it was made, and the makers conveyed away to their own houses any balance of stock remaining unsold. This is palpably inconsistent with our present system. The difficulty of flooding was not felt in former times.

* According to local residents, this is the common condition of the tract during a season of fair rains.

NOTE ON THE KUROUR SALT WORKS.

Brief description of system on which the tract was formerly worked.

8. It will not be inappropriate here briefly to describe the system on which the tract was formerly worked. From A. D. 1806, the earliest period connected with which documents appear to exist, down to 1837, the tract was leased to contractors who paid sums, successively lessening, from Rs. 14,000 to Rs. 7,000, and who sublet to the actual workers the right to make salt. Each owner of a work paid from Rs. 30 to Rs. 60 per annum, according to the size of his individual work, and in addition to the sum thus paid to the contractor, Rs. 2-8 per work was levied by the land-owner on whose estate the factory was set up. Between 1829 and 1834 the works were managed "Kham" by the District authorities through the medium of an Ameen, and in the latter year were again given out on contract for three years at Rs. 7,000 per annum. Thereafter, *i. e.*, subsequent to 1837, they remained unworked until 1843, when, for one month only, they were re-opened on the understanding that the workers would pay Rs. 2 per maund on all salt produced. On Act XIV of 1843 becoming law, these works, in common with others of their kind, were broken up.

Progressive decline in yield of contracts.

9. The progressive decline in the yield of the contracts may be taken to mean that as British rule extended, and, under a general pacification, trade with remoter districts arose, the bitterish local salts lost favor. Up to 1829 the contracts would seem to have been fairly profitable, judging by what it is still possible to gather; for example, when, in 1815, Rs. 10,000 per annum were paid, the results seem to have been as follows:—About 400 works existed, and for these the contractor, receiving on an average Rs. 45, would take Rs. 18,000. He received, in addition, fees, such as 1 Rupee per work in consideration of dances which he was expected from time to time to give, and Rs. 4 per work as, "Bhent" or free gift, and a fee averaging Rs. 30 from each of a staff of twenty professional weighers. His outlay was small: he kept up twenty peons at Rs. 3 each, and writers whose salary aggregated Rs. 22.

Thus, his receipts were yearly ..		Rs. 20,600
Deduct salaries		„ 984
		Rs. 19,616
Deduct payment for contract		„ 10,000
And his profit remained at		Rs. 9,616

In the interregnum, when the works came under Kham management, similar fees appear to have been taken on account of Government. In 1843, beyond one Ameen, whose salary, Rs. 10 per mensem, was provided by the Noonecahs, and who was to furnish weekly accounts to the Collector of the District, no establishment was entertained by Government. Duty was to have been paid at the end of the season on all salt sold; the arrangement came fortunately to an early end, for the State must otherwise have lost largely.

Work when commenced usually.

10. Work commences, according to custom, about the 4th of October, when the owners of factories are accustomed to dig shallow wells, about 15 feet deep, in the mounds which remain above the general level of inundation. From these they draw, by hand labor, a certain quantity of brine which they expose in *patas* of small size, also constructed on favorable spots on the same mounds. By about the middle of December they expect the waters to recede, and to be at liberty to commence on their larger works.

NOTE ON THE KUROUR SALT WORKS.

11. Without lengthening this Note by inclusion of details on which Mr. Ray has already reported, I will address myself to consideration of four principal questions, *viz.*:— Four questions discussed in present Note.

1*st.*—The cost of the salt to the maker;
2*nd.*—The price at which it may be expected to sell;
3*rd.*—The character of the produce;
4*th.*—The prospect of being able to carry out this experiment of re-opening salt works without entailing cost upon the State.

12. The first of these questions, *viz.*, the cost of making salt, it is impossible to answer with any degree of precision. No theory can be founded on the results of the season just ended, for no one has cleared his expenses; and, during thirty-three years of disuse, during which most of the old skilled hands have died out, the memory of everything connected with the processes has all but lapsed, while the general advance in price of commodities and of labor would render even the most precise details of past cost, were such available, of but slender reliability as a present guide. Nor is much to be gained by cross-questioning such witnesses as are now procurable; for, to begin with, it was not in times past their habit to perplex themselves with minute calculations such as European modes of business dictate. To refer each item of expenditure to its influence on the general out-turn, to try back over all these until the precise incidence of cost on each maund of produce was acquired, was not in them; and as long as their trade fed and clad them, they were not likely to trouble themselves about much else, and among those of the present time, not only have we much real ignorance to contend with, but their determination to exaggerate every item of expenditure prevails over all cross-questioning. The estimates herein presented must accordingly be accepted, as they are tendered, with much reserve. 1st Question—Cost of salt.

13. Mr. Ray has calculated that salt can be made at six annas per maund.

14. A *punchayut* of Nooneeahs which, in despair of arriving at any satisfactory conclusion by direct questioning, I set to determine the matter among themselves, announced as the result of their calculations an estimate of twelve annas per maund.

15. In comparison with these, on neither of which do I rely, holding one to be too low and the other too high, I append a calculation resulting from my own inquiries on the ground.

Calculations of expenses of full working strength of a pan capable of turning out 200 or 240 maunds of salt in a season.

	Rs.	A.	P.
Four bullocks calculated to last eight years, equal to Rs. 40, taking wear and tear, &c.	5	0	0
Water plant	2	0	0
Digging well (household labor). Lime for pan (right of digging kunker)	0	4	0
Wages of seven laborers for five months	52	8	0
Expenses of five members of family for five monthe at one seer of grain per diem, at the rate of 16 seers per Rupee ...	46	14	0
Food for four bullocks for five months at one Rupee each per month	20	0	0
Expenses of brotherhood when making pan *pucca*... ...	3	8	0
Sundries	6	9	0
Interest on advance (taken at Rs. 50)	1	8	0
Premium to surety	5	0	0
Total expenses ...	*143	3	0

* From this, if Rs. 13-2 be deducted for probable exaggeration of laborers' wages, the incidence on a mean out-turn of 220 maunds would be reduced to 9 annas 5½ pie.

NOTE ON THE KUROUR SALT WORKS.

Memo.—If the manufacturer produced 200 maunds of salt, the cost of manufacture per maund of salt would be 11 annas and $5\frac{2}{3}\frac{3}{2}$ pies.

Again, if the manufacturer produced 240 maunds of salt, the cost of manufacture per maund would be 9 annas and $6\frac{1}{2}\frac{1}{0}$ pies.

16. According to local information, the out-turn of a work will be from 200 to 240 maunds, and on these quantities the mean incidence of the cost, as derived from local information, would, minor fractions excluded, be $10\frac{1}{2}$ annas per maund. Wages of laborers and expenses of owners' family are probably still exaggerated. The *Bhutteya*, or co-operative system which prevails on the Oudh works, is here unknown, and hired day labor is the rule. For this the owners are unanimous in asserting that they pay the equivalent of two annas per diem, which is, however, somewhat doubtful, in presence of the fact that neighbouring English indigo planters obtain their labor for one anna. It is asserted against this that more ablebodied laborers are required for salt making, and this I find to be the impression of Mr. Ray, who has seen the hands at work. With this in evidence, and with another fact (*vide* following paragraph) yet to consider, I do not think that the total of expenditure can safely be put at a lower figure than the sum of Rs. 143-3 already given. Practically, more will, at the outset, be spent, for bullocks cost, in fact, about twenty Rupees per pair.

17. But the figures given go on the assumption that salt alone is made; whereas, with the salt and without, as far as I am able to see, any addition to plant or labor, the tract is said to turn out simultaneously about one maund of sulphate of soda for every two maunds of salt. The sulphate, of which three qualities* are described, is said to sell at an average of 45 seers per Rupee, so that, supposing one hundred maunds to be sold, there would be a considerable addition to the maker's profits, and a corresponding reduction of incidence of cost. The results of a season may, therefore, with necessary reservation for a state of things in which complete accuracy is unattainable, be taken to be somewhat as follows: —

Out-turn in bulk, salt say	220	maunds.
Kharee	100	„
Total ...	320	maunds.

cost of plant and labor being put at Rs. 143-3, the incidence per maund is reduced to, say, 7 annas 2 pie, or, adding 5 pie for cost of cartage to storage ground, to 7 annas 7 pie on the salt.

Financially, something like the following would result in a good year and with a fair market:—

Dr. *Cr.*

	Rs. A. P.		Rs. A. P.
To 220 maunds of salt at, say, Rupee 1	220 0 0	By cost of production, including cartage of salt to store	158 14 8
To 100 maunds of sulphate of soda at an average of 45 seers per Rupee ...	87 8 0	Balance, representing maker's profits	148 9 4
	307 8 0		307 8 0

* Putthur selling at 40 seers, British weight, per Rupee.
Bhodee „ 45 „ „ „
Mixed „ 50 „ „ „

NOTE ON THE KUROUR SALT WORKS.

18. This profit, equal to 93·03 per cent., looks tempting enough, but will by no means content the makers, who clamour for a net Rs. 1-14 for their salt, a price which, it is almost certain, they will never be able to secure. The tradition still lingers of the time when, for their better salt, they could get as much as Rs. 2-1 per maund, and they will be but ill-contented with the lower rate, which competition of better salts will impose on their produce if it is to enter the market at all.

19. The old rates appear to have been as follows :— 2nd Question – Selling price of salt.

	S.	C.	
Salt, first quality, per Rupee ...	19	3	(British.)
„ second „ „ ...	33	9	„
„ third „ „ ...	48	0*	„
Sulphate of soda „ ...	96	0	„

20. Now, working out these data, we should arrive at a financial result but little different from that already arrived at. There would be no cartage to pay, and the season's profits might be Rs. 165 against Rs. 148; but not only was the cost of living thirty-three years ago very much less than now, but there were opportunities for extra profits, such as we should carefully bar, so that it may be fairly assumed that in ancient days the benefit to the salt maker, when a large area looked to him as its sole provider, was, in reality, much larger than it can ever now become.

21. In the debtor and creditor account already given, I have put the price of salt at one Rupee per maund, and expect to see it fetch no more all round. When the Assistant Commissioner endeavoured to introduce it to the Badshahpoor traders, although there and by local sales 130 maunds 24 seers were disposed of at an average of Rs. 4-9-8,† buyers in the abovenamed mart appeared promptly to have repented of their bargain, and to be unwilling to give more than Rs. 4 per maund, at which rate the holders of stock refused to sell. And unless buyers will come to the works, the owners of the salt will find themselves obliged to accept the cost of carriage to the nearest mart, an outlay which it might not be easy to recover from already reluctant buyers.

22. Analysis shows the quality of the salt produced in this tract to be much below that turned out either at Noh (the worst of our older salt works), or at the Mullowna Factories of Oudh. The average of chloride of sodium in thirteen specimens of produce from the first-named is 86·41 per cent., that of twelve samples of Mullowna salt is 86·16; but from Kurour the average of twelve parcels is but 60·07, and while at Noh the highest percentage is 99·87, and at Mullowna 94·41, the very best of the Kurour specimens gives only 81·37 per cent. (Annexures I and II). With Sooltanpoor salt ranging up to 96, and Balambha containing 92·00 or more of absolute chloride, not to mention the yet purer Sambhur and Lahore salts, all destined to offer themselves at rates which will cheapen in proportion as railways extend, no one can refuse to see that the prospects of the Kurour produce are anything but hopeful. Indeed, it is manifest that it can expect to enter the market at all only on condition of under-selling the foreign salts by as much as will make amends for its great inferiority, and this is exactly the condition to which so far its producers have shown a great reluctance to accommodate themselves. 3rd Question—Character of produce.

* Average 33 seers 8 chittacks.

† Rs. 4-8 per maund for 75 maunds 29 seers of Muraon produce; Rs. 4-12 per maund for 10 maunds of Kurour, and Rs. 4-9 per maund for 44 maunds 35 seers of Mahendroo produce, were the prices actually obtained.

23. True, the produce may improve, but not, in my opinion, to any very great extent. The sulphates are unmistakeably abundant, and it is clear that by the "Seenchan" process, only a certain limited percentage of these can be eliminated. It will be possible, by somewhat relaxing one of our rules, to favour in a measure the purification of these local salts; but, at the best, only a slight improvement will thus be effected, and do what we or the makers may, the ultimate result will be that the Kurour salt will remain, by a very considerable percentage, inferior to those western salts now well established in public liking, with which it will have to compete in every market to which it can possibly gain access.

4th Question—Prospect of success.

24. The prospect of being ever able to work this scheme, without extra cost to the State, appears to me absolutely unrealizable. Here, as in Oudh, a great exodus of the classes who formerly made salt has taken place. Remunerative, if distant labor has drawn them away, while those who remain have betaken themselves to agriculture, or to such day-labor as was to be had in the neighbourhood of their homes. Vague stories are current of people who have been written to informing them that the old trade has been revived, and of numbers who are expected to return in consequence; but all these histories are in the last degree untrustworthy, and, in presence of the general discouragement which the coldness of the public towards their produce has spread among those who in any case would have had to bear up against the natural drawbacks of re-establishing a defunct industry, but who expected at least a ready sale for what the conditions of such a re-establishment allowed them to have in readiness, and whose disgust at the reception which their produce has experienced is bitter, I cannot persuade myself that any such influx of labour and capital as will enable us, out of the cess of one anna per maund, to recoup our expendidure can reasonably be looked for.

25. Our sanctioned expenditure is Rs. 1,200 per mensem, equal to Rs. 14,400 per annum. We have not spent as much per mensem so far; but Messrs. Ray, Hardingham, and Ashton are all of one mind as to the full sum being the least which would meet our wants if the work were brisk; and after some local experience, I see no reason to question the opinion of these gentlemen.

26. But to provide at one anna per maund for a yearly expenditure of Rs. 14,400 (leaving, it had better be noted, all cost of buildings, barriers, &c., unprovided for), we must have made and sold 230,400 maunds of salt. To turn out so much at an average of 220* maunds per work, would require 1,047 factories, for which, according to local report, at twelve hands per factory, no less than 12,564 persons must be got together, including owners of works, their families, on whose labor they greatly depend, and hired workmen. Strike off one-third for the undeniable tendency of all with whom just now in course of such inquiries as this we come in contact, to magnify all the requirements of the position, and we still arrive at what is to me the equally hopeless number of 8,376 persons required to make this experiment a financial success. I do not believe that any such number, for any inducement which any sane servant of Government would recommend, will be got together, nor can I

* Mr. Ray and I differ slightly—he going 225 maunds, I going on the replies to my own local inquiries.

NOTE ON THE KUROUR SALT WORKS.

find any traces of such a hope among those whose intimacy with the place and its history is greater than mine. About 600 factories seem to have been the largest number ever at work in the days when the salt of these parts in default of better was eagerly taken, and, giving them credit for even 240 maunds per work, their out-turn in the year could not have exceeded a lakh and a half of maunds. If this were their limit when demand was good, when prices were high and restrictions unknown, what reasonable grounds have we for assuming that after thirty-three years of disuse during which, as communications have improved, salts of a higher class have come to dispute the market, and to force the local product to lower its rates in the ratio of its inferiority, they will be found able, under all drawbacks of the existing condition, to turn out eighty thousand maunds, or more than 50 per cent., more than they were accustomed to yield when they had everything their own way? I should be glad to think myself mistaken about this, for no one can less like the idea of the department failing in anything which it has once undertaken; but a conviction is stronger than a wish, and I must not disguise mine that we must give up all hope of making the Kurour works maintain such an establishment as will render it safe to permit their prolonged existence.

Conditions stated on which works can remain open.

27. The conditions, on which alone it seems to me possible to keep these works open, are these,—

1*st.*—That the public should take to buying the salt: to assure or induce towards which condition, the makers must be willing to accept reasonable prices;

2*nd.*—That Government should consent to some loss of revenue in the shape of outlay on establishment;

3*rd.*—That advances should continue to be accorded, and that on conditions which imply a considerable risk of irrecoverability of a large percentage.

First condition.

28. With the first of these we can have little to do; in point of fact, the less we interfere the better, and such non-interference is not altogether disconnected with the third, as will presently be shown.

Second condition discussed.

29. As regards the second, the following is, it seems to me, the best we can expect:—We have had 339 factories at work, and it may be possible to get as many as 500 a-foot. These 500 may turn out a lakh of maunds, our realization from which would amount to Rs. 6,250. Taking our expenditure at Rs. 14,400, this would leave Rs. 8,150 per annum to be provided by Government, or the cess for establishment must be more than doubled, which the produce simply cannot stand. The above is, supposing the salt to sell readily, which, its quality remembered, is not to be guaranteed.

Third condition discussed.

30. And not only must advances be made, but we must be less timorous about ultimate recovery; must let the owners of works do what best suits them with their produce, and be content to realize in driblets spread over considerable spaces of time, whatever we ultimately succeed in recovering. Valid security not being procurable, we must be satisfied to let much of our outlay be virtually unsecured, or must refuse all aid, in which case the experiments will promptly die a natural death.

31. On the disadvantages of thus entangling ourselves in a series of accounts current with a horde of impecunious borrowers, it is needless to enlarge.

NOTE ON THE KUROUR SALT WORKS.

Our position regarding advances made is unsatisfactory;

32. Our position, in respect to those to whom advances have been made, is already far from satisfactory, and, as far as I can yet see, we stand to lose a considerable, if not the larger, portion of the money. Mistakes in the detailed list of securities prepared under my orders, have compelled me to return the papers, and I am thus not yet in a position to present such an analysis as I prepared of those of Mullowna; but such information, as I possess, is not re-assuring, and it becomes needful to expose what appear to me weaknesses in our case as against original borrowers and sureties. But before going further, it will be but fair to the Assistant Commissioner, who has undeniably worked most earnestly to bring this matter to a successful issue, to note that had any previous experience qualified him to gauge accurately the value of securities, and had he, on that, been careful to advance only on unquestionable surety, he would have made no advances at all, and the works would never have started.

Firstly, we have no bonds from borrowers;

33. *Firstly*, then, we have no bonds from the original borrowers, and consequently, on them, or their property, we possess no legal hold whatever. This suggests the question—may not such a lapse on our part be held to invalidate the security bonds, should it be pleaded that these were given under the natural impression that we had taken legal acknowledgment from the actual borrower?

Secondly, the solvency of the securities is doubtful.

34. *Secondly*, the solvency of the persons on whose security money has been issued is more than doubtful. In only a few instances was direct reference made to revenue officials to test the competence of the person put forward as surety. At Mr. Ray's request a kanoongo was deputed to his camp by the Moongra Tehsildar, and on his advice security was accepted. He is said to have prepared a list of all persons on whose security money was given, and I have sent for a copy of the document for the chance of its throwing some light on the subject. Here, as at Mullowna, I think it would be well were the matter made over to the District authorities in view to their determining for us who was or was not solvent. We have, for example, over Rs. 4,000 out on the security of one man, Dirgpal Singh, of Muraon, and from all I could learn he is certainly not worth as much.

Amount advanced, recovered and still outstanding.

35. We have advanced altogether Rs. 14,350, out of which Rs. 598 have been recovered, leaving Rs. 13,752 in outstanding balance. We have in our keeping about 6,000 maunds of salt, barely worth as many rupees, so that, at best, we have Rs. 7,752 at stake on what is, I cannot help fearing, very shaky security.

36. The cattle and well plant of the owners of works were, at the close of the season, allowed to be taken away on security (executed on unstamped paper) of eight local residents, who agree to produce them in October. The document is completely informal and specifies no number, either of cattle or utensils. But, however objectionable it may have been to lose our physical hold on this property, I confess to not seeing what else was to be done; for the cattle at least could not have been penned in the flooded enclosure, and as things stand, once the error of not taking legal acknowledgment from the actual borrowers was fallen into, it is doubtful if we have done any mischief by releasing, with the air of an act of grace, property which we lacked legal right to retain.

(Signed) F. W. VERE.

NOTE ON THE KUROUR SALT WORKS.

ANNEXURE I.

Twelve bottles containing specimens of Salt from the Mallowna Works sent by the Deputy Commissioner of Customs, Agra.

No.		E. Matter.	Sulphate of Soda.	Common Salt.
1	*Sample of the Purwapoor Dawana*— "Oree," son of "Dookhee," licensee ...	.....	18·92	80·15
2	*Sample of the Kurrumtullia Dawana*— Bowraj, son of Pershad, licensee ...	.....	7·32	92·06
3	*Sample of the Sahibgunge Dawana*— Daibee, son of Munow, licensee ...	.....	6·71	92·47
4	*Sample of the Oonchwa Dawana*— Bhagoo, son of Jhooraee, licensee ...	.....	25·62	73·98
5	*Sample of the Gouluria Dawana*— Gunga, son of Mân, licensee ...	.....	16·47	83·02
6	*Sample of the Nareepore Dawana*— Lalla, son of Dhunaee, licensee ...	.....	5·49	94·41
7	*Sample of the Chupkaha Dawana*— Lalla, son of Mathadeen, licensee ...	.....	9·76	89·60
8	*Sample of the Narainpore Dawana*— Bhimanee, son of Koonoo, licensee ...	.....	37·82	61·64
9	*Sample of the Puchhita Dawana*— Bhookum, son of Bowraj, licensee ...	.....	4·88	94·41
10	*Sample of the Bhooreehar Dawana*— Cailee, son of Bhikaree, licensee ...	.....	6·71	92·88
11	*Sample of the Jeeah Khera Dawana*— Zalum Sing, son of Bucktawar Sing, licensee	2·00	6·10	91·24
12	*Sample of the Beaspore Dawana*— Goordeen, son of Gya Deen, licensee ...	4·00	7·93	87·95

Thirteen bottles containing Salt from the Noh Work sent by the Officiating Collector of Customs, Delhi, in accordance with the Deputy Commissioner's memorandum of the 1st instant.

No.		E. Matter.	Sulphate of Soda.	Common Salt.
1	Mahlub Sur, old salt	.....	29·28	69·87
2	Ditto ditto, very old	.....	28·06	71·10
3	Ditto ditto, new	.....	10·98	88·77
4	Noh Sur	.....	*Trace*	99·87
5	Ditto	.....	*Trace*	99·26
6	Khairla Sur	.....	3·66	96·17
7	Ditto	.....	*Trace*	99·46
8	Ditto	.....	39·04	60·83
9	Fazilpore	.....	13·42	86·30
10	Ferozepore	.....	3·05	96·58
11	Oontka	.....	30·50	69·05
12	Salahere	.....	1·22	97·82
13	Baee	.....	10·98	88·36

(Signed) C. J. HICKIE,

The 25th August 1870. *Analyst.*

NOTE ON THE KUROUR SALT WORKS.

ANNEXURE II.

Twelve specimens of Salt and Kharee from the Kurour Salt Works forwarded by the Assistant Patr l in charge of the Works, with docket No. 17, *dated the* 21*st instant.*

THREE FIRST CLASS SALTS.

No. 1,	Sulphate of Soda ...	20·13	Common Salt ...	...	79·73 per cent.
„ 2,	„ ...	21·96	„ ...	...	77·26
„ 3,	„ ...	18·30	„ ...	...	81·37

THREE SECOND CLASS SALTS.

No. 4,	Sulphate of Soda ...	50·02	Common Salt ...	...	49·32
„ 5,	„ ...	51·20	„ ...	...	48·49
„ 6,	„ ...	44·53	„ ...	...	54·96

THREE THIRD CLASS SALTS.

No. 7,	Sulphate of Soda ...	50·02	Common Salt ...	...	49·32
„ 8,	„ ...	52·46	„ ...	...	46·85
„ 9,	„ ...	46·36	„ ...	...	53·42

THREE KHAREE AND REFUSE.

		E. Matter.				
Kharee,	No. 10, Sul. Soda ...	6·00	85·40	Common Salt ...	...	7·39
Refuse,	„ 11, „ ...	4·00	87·21	„ ...	...	8·21
„	„ 12, „ ...	25·00	60·39	„ ...	...	13·97

AGRA,
The 27*th August* 1870.

(Signed) C. J. HICKIE,
Analyst.

Kurour Local Salt Works.

Receipts to 30*th June* 1870.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Government duty	174 0 0		
Government cess	3 10 0		
Landholder's royalty	3 10 0		
		181 4 0	181 4 0
Charges.			
Fixed Supervision	133 8 9		
Preventive	2,214 7 0		
		2,347 15 9	
Contingencies.			
Travelling allowances	51 0 10		
Stationery	103 9 5		
Miscellaneous petty contingencies ...	206 6 8		
		361 0 11	
			2,709 0 8
House and preventive posts ...	.....	.....	1,469 9 1
Cost of hedge	.....	.....	3,371 14 3
Ditch	.....	.....	428 7 4
Carting salt to pits	.....	.....	159 6 3
Carpenters' work	.....	.....	374 6 0
Blacksmiths' „	.....	.....	62 0 0
			8,574 11 7
Advances	.....	.....	14,350 0 0
			22,924 11 7
Recoveries	.....	.....	539 0 0
Rs. ...	.....	.....	22,385 11 7

Appendix D.

Review of the administration of the Berar Section of the Inland Customs Line for the official year 1869-70.

BERAR SECTION.

CHANGES involving reduction of expenditure.

Important changes in the organization of this section have taken place during the year now under review, and have reduced the prospective outlay from Rs. 11,582* per mensem to Rs. 6,439-8.† As the scheme, in all its details, is now before the Resident, it would be profitless, here, to do more than glance at its ultimate issue.

PRELIMINARY REMARKS. Results, for the first time, compared with those of an entire official year.

2. In the present instance, we enjoy, for the first time, the advantage of being able to compare our realizations with those of an entire official year, somewhat, however counterbalanced by the disadvantage, where receipts are in question, of a lowered rate of duty, which regarded at first, as a mere alteration of account, has, in fact, under latest orders, resulted in depriving us, locally, of five annas on every maund of salt admitted into the Assigned Districts. All drawbacks notwithstanding, the income of the year exhibits, however, a sensible increase on that of 1868-69. Salt is, here, our one taxed staple, and the revenue which it has yielded, compared with that of the preceding year, is shown in the annexed table.

Effect of lowered rate of Duty.

FINANCIAL RESULTS.

GROSS REALIZATIONS compared with those of previous year.

Year.	Salt.			Miscellaneous.			Total.		
	Quantity.	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
1869-70	2,32,773 14 12	3,15,008	5	4	3,517	7	11	3,18,525	13	3
1868-69	2,00,193 6 9	3,00,292	8	6	2,508	7	8†	3,02,801	0	2

Increase, actual, in Duty on Salt,

The increase, in favor of 1869-70, thus amounts to Rs. 15,724 or 5·19 per cent.

and what it would have been had rates of duty remained unaltered,

3. Had the rate of duty remained, as in 1868-69, at Re. 1-8 per maund, the income would have been Rs. 3,52,676, and the increase would then have risen to 16·47 per cent., and had the arrangements, with prevision of which some of the earlier estimates of this office were framed, *viz.*, the recredit from Bombay of all duty there received on salt which ultimately crossed our frontier, been permitted to endure, the revenue of this section would have amounted to Rs. 7,01,836 or 135·17 per cent. above that of 1868-69.

or had earlier arrangements endured.

Cause of increase.

4. The cause of the increase which, despite the untoward influence recorded in paragraph 2, remains in evidence, may be briefly described as the development of demand, as the population of the Assigned Districts has to rely, more and more exclusively, on legalized supplies. In the year now reported on, this extension of demand has resulted in an import of 32,580 maunds (16·27 per cent.) in excess of the quantity on which duty was paid in the preceding year.

* Exclusive of contingencies.

† The difference of 8 annas between these figures and those of last year's report is due to a subsequent addition to the item of income tax.

MISCELLANEOUS RECEIPTS.

5. Miscellaneous receipts require but brief notice, for though the increase in 1869-70 is proportionately large (40·23 per cent.) the aggregate is still unimportant. The increase is due to the accident of an unusually large seizure having occurred in one of the sub-divisions.

CHARGES.
Decrease and cause.

6. Charges are somewhat below those of the preceding year; the important economies alluded to in the opening of the present report, having come into effect too late to produce any very marked change in the figures of the year in which they were devised, which are exhibited in the following table:—

Year.	Fixed.	Contingent.	Total.
	Rs. A. P.	Rs. A. P.	Rs. A. P.
1869-70	1,18,789 14 5	9,277 10 5	1,28,067 8 10
1868-69	1,19,594 9 4	15,188 10 7	1,34,783 3 11

Discrepancies in figures explained.

7. Before proceeding further, it will be necessary to explain the difference between the figures this year attributed to 1868-69, and those which appear in the printed report. Charges for that year are now shown at Rs. 1,34,783-3-11 instead of, as formerly, at Rs. 1,28,297-13-11, the difference being Rs. 6,485-6-0. The principal cause of this was a misapprehension on the part of the former Collector of the Division, who failed to bring to account a disbursement of Rs. 6,308-8-0, awarded, as demurrage, to the Great Indian Peninsula Railway Company, for detention of their waggons at the frontier, when the line was first laid down. The balance of difference, Rs. 176-14-0, was occasioned by another omission of Rs. 177, salary on account of Berar, for one month, of the Collector's Office hands, against which had to be set *a per contra* error of two annas, for which this office is itself answerable.

Fixed charges, *their decrease.*

8. The decrease in fixed charges, now very trifling, in fact but Rs. 804-10-11, will, during the current year, assume a very different character.

Contingencies, *their decrease.*

9. That in contingencies, amounting to Rs. 5,911-0-2, is principally referrible to the absence of the item of demurrage which added so largely to the charges of the preceding year. Some subheadings of charge show small increases, such as Rs. 721-7-11 in travelling charges, due to the Collector having made a tour of the line; and Rs. 620-4-0 in postages, arising from a change of system whereby postage has now to be paid on correspondence of subordinate offices with the Collector. But, charge against charge, the ultimate issue is a decrease, as above noted, in favor of 1869-70.

NET REVENUE.

10. Deducting charges from gross realizations, the net income of the Berar Customs Line, together with the proportion which, in the last two years, charges have borne to revenue, will be apparent from the following table:—

Year.	Gross realizations.	Charges.	Net Revenue.	Percentage charges on gross realizations.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	
1869-70	3,18,525 1 3	1,28,067 8 10	1,90,458 4 5	40·21
1868-69	3,02,801 0 2	1,34,785 3 11	1,68,017 12 3	44·51

Decrease of incidence of charges.

11. As already remarked, time has not yet served for the effect of the recent very extensive reductions to be visible, but during the current year a very important change in the incidence

of charges will be perceptible; the exact proportion of which, depending upon the reception accorded by the administrations of the Central Provinces and of the Assigned Districts to the departmental proposals, cannot, however, be as yet accurately defined.

COURSE OF TRADE unaltered.

12. No alteration whatever has occurred in the course of trade which follows well-defined lines. Entering, to the extent of 99·74 per cent. on the whole imports, by the Railway station of * Mulkapoor, salt is thence distributed, from depôts like Sheagaon and Budnaira, to minor marts throughout Berar.

PRICES OF SALT.

Averages.

13. Prices of salt at Budnaira, the principal and very much the most important mart in Berar, appeared to have averaged Rs. 5-2-9 per maund, or about 7 seers 12 chittacks per Rupee. There is considerable difficulty in obtaining accurate returns of retail prices in the interior. Tuhseel reports are open to much suspicion, and this Department has no agency of its own which it could hold responsible for collection of statistics at any distance from the line, while the few towns of importance, such as Naga Dewulgaon and Sindkera, which lie actually on the line, and which draw their supplies from Jaulnah, are too close to the frontier for their rates to be accepted as an indication of prices in the interior. Moreover, notwithstanding the pains taken, when last year's reports were reviewed, to induce the Collector to be careful in the matter of collating prices, it has been a serious disappointment to find his tables disfigured by contradictions so palpable as to deprive them of all claim to confidence.

Difficulty of obtaining accurate returns.

Departmental returns still inaccurate.

SMUGGLING.

Increase apparent only.

14. On the surface, an increase of smuggling has become apparent; and in 49 cases, 116 maunds 37 seers 9 chittacks of salt have been confiscated, against 26 maunds 24 seers 10 chittacks in 27 cases in 1868-69. But against this, while in 1868-69, 237 maunds 33 seers 7 chittacks paid double duty in 98 cases, only 67 maunds 10 seers 6 chittacks, in 64 cases, have been subjected to the latter penalty in 1869-70. Therefore, while, in the earlier year, 264 maunds 7 seers 1 chittack of salt came under departmental interference, only 184 maunds 7 seers 15 chittacks have been subjected to penalties in the year under review. The first aspect of affairs finds its explanation in the fact that the Collector of Customs, on the ground that the provisions of the law must by this time be generally known, has begun to recommend the Commissioner of Revenue to award penalties more severe than were considered appropriate as long as the people of the Berars might reasonably be held to be unacquainted with departmental rules. Revision, in all cases of confiscation, or imposition of double duty, by an authority so high in grade as a Commissioner of Revenue, may be held to afford assurance that when, as mostly happens, sanction is accorded, the conclusions on which the original recommendation was grounded, have been valid.

Explanation of the foregoing.

PENAL ACTION OF THE DEPT.

15. The following table shows the penal action of the Department in respect to persons :—

Year.	Total No. of smugglers captured by the Department.	Released by Department.				Sent up for trial.	Acquitted.	Convicted.	Pending at close of report.	Percentage of convictions on persons sent for trial, less pending cases.
		On payment of single duty.	On payment of double duty.	For want of proof.	Total.					
1869-70 ...	138	1	97	8	106	32	13	17	2	53·12
1868-69 ...	292	6	195	28	229	63	26	37	...	58·73

* Of 2,31,440 maunds 19 seers 13 chittacks (8,571 tons), 2,30,835 maunds 29 seers 9 chittacks (8,549 tons) went in by Mulkapoor.

PERSONS.

Number subjected to interference.

16. The number of persons who have brought on themselves departmental interference during 1869-70 is considerably smaller than in 1868-69, *viz.*, 138 against 292; and out of this number, it is satisfactory to find that our officers were able to dispose of 106, or 76·81 per cent., without resort to the Criminal Courts. Thirty-two persons only were sent for trial; or, in other words, taking the population of Berar at the census figure of two and a quarter millions, only ·0014 per cent., or one inhabitant in every 70,000, has been subjected to criminal process at the hands of the Department of Inland Customs. With such statistics in evidence, it cannot be argued that the salt laws weigh heavily on the people of Berar.

Number committed to Criminal Courts.

Results of committals.

17. Of the thirty-two persons committed for trial, thirteen have been acquitted; the results, as regards two, are yet unknown, and seventeen, or 53·12 per cent., have been convicted. This latter result is very far from satisfactory, and would have formed matter for very severe reprehension of the officers by whom the cases were sent for trial, had the Collector not been at pains to show that, in the cases of the twelve out of the thirteen who escaped punishment, there was, to say the least, room for strong difference of opinion. In one case, in which five persons were concerned, this office itself held that prosecution was justifiable, and exposed, in view to prevention of future failure of justice, to the officer by whom the case was decided, its reasons for holding an opinion different to that at which the Court arrived. On the whole, then, there is reason to think that the greater number of our judicial failures have been due to misapprehension by Judicial officers, rather than to inherent defects in the cases, as sent up by the Department; and it must be added that in one respect, the Department is at peculiar disadvantage in Berar, *viz.*, in that our sub-divisions are almost all at such distances from the Courts which try our cases as, added to the difficulties of communication, make it all but impossible for our officers personally to attend at the trial of any important case. The advantage of their presence in a country where the law is new, is palpable; but the conditions under which they are placed, render it, as a rule, unattainable, and our cases depend wholly on written advocacy, and on the evidence of unlettered and not infrequently of unintelligent witnesses.

unsatisfactory.

Apparent causes of unsatisfactory results.

Synopsis of convictions and punishments.

18. Out of the seventeen persons whose conviction has so far been ascertained, three only have chosen to suffer imprisonment, while fourteen or 82·35 per cent. of the whole number have paid fines, averaging as high as Rs. 21-14-3:—

Year.	Imprisoned in default of payment of fine.							Paid fines.																			
	For 6 months.	Above 3 months.	Above 2 months.	Above 1 month.	Above 15 days.	Above 10 days.	Below 10 days.	Total.	Of Rs. 250 and upwards.	Aggregate paid.	Below Rs. 250, above Rs. 100.	Aggregate paid.	Below Rs. 100 to 50.	Aggregate paid.	Below Rs. 50 to 30.	Aggregate paid.	Below Rs. 30 to 20.	Aggregate paid.	Below Rs. 20 to 10.	Aggregate paid.	Below Rs. 10 to 5.	Aggregate paid.	Below Rs. 5.	Aggregate paid.	Total fined.	Aggregate paid.
1869-70...	...	...	...	...	1	2	...	3	...	...	1	150	...	...	2	60	2	40	2	30	3	15	4	12	14	301
1868-69...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	3	140	1	25	7	125	7	86	18	66	36	442

LONAR LAKE.

19. The Booldana District contains, as the Resident is aware, a natural curiosity, known as the Lonar Lake, of which from the very first installation of the line, the peculiarities attracted

departmental attention and enquiry. Its waters were, to all appearance, distinctly alkaline; their produce, both by local residents and by district authorities, was declared to be merely carbonate of soda, the existence of which, in vastly preponderating measure, was determined by the then Customs Analyst. In six specimens of water he found an average of only 8·66 of common salt and out of the six, the average, in five cases,* was but 3·40. The carbonate of soda which, during the hot season, is extracted by spontaneous solar evaporation (no vats or terraces being used as in ordinary salt works) is exported, mostly to Jaulnah, a small portion only being consumed at Lonar itself in soap and glass making; the glass, thus made, being exclusively devoted to production of the wristlets worn by native women. The right of recovering the carbonate of soda is leased out for a term of three years, by the district authorities, for the sum of Rs. 2,000, and the present contract will expire in November 1871. Such was the information first elicited, and it appeared to warrant freedom from any anxiety, such as the significance of the name "Lonar" had naturally aroused, as to the nature of the produce of this very remarkable locality, and its effect on the salt revenue.†

Results of first enquiries.

Utilization of produce,

Although no cause for anxiety had been revealed,

20. Still, as *some* salt was known to exist in combination, suspicion was not entirely lulled; and our local officers were placed under injunction to watch the working of the Lake and to bring to notice whatever might at any time appear to show that, after all, the alkali, ostensibly its solitary product, might yield more or less of alimentary salt.

observation was nevertheless maintained.

21. In November of 1868, Mr. W. Clarke, Assistant Patrol of Rissood, reported that out of a despatch of eleven maunds of alkali he had picked certain crystals, which, on examination, proved to be alimentary salt, of a high quality, closely akin indeed to the celebrated Sambhur salt; and, on inquiry from this office, the same officer stated that these saline particles were but few in number, and not more than about three per cent. of the mass. While this intimation appeared to confirm the previous conviction, that no danger to our revenue was to be apprehended from Lonar, it was still held desirable to obtain a special report, written late in December of 1869, by the officer above named, Mr. W. Clarke. The following information was derived—that the produce of the Lake was divided into three classes, known as "Dhulla Khar," "Papree Khar" and "Bhooskee Khar"; that of these three, the first-named, procured mostly in the cold season, contained about fifteen seers to the maund (37·50 per cent.) of a very pure salt. This estimate was, by the Collector, reduced by one-half, on the ground that only distinct crystals would be edible. No information was

Fresh information thus derived

still seeming to point to absence of danger,

until result of renewal inquiries

led to discovery of a produce containing a considerable proportion of salt.

* The sixth specimen was of water contained in a small cistern—the other five being taken from the Lake itself.

† Dr. Warth, our first analyst, a trained scientific man, who has unfortunately been prevented by other pressing avocations from examining specimens, discovery of which has rendered this dissertation necessary, furnishes the following information from a valuable German work, Karsten's Salinenkunde (art of salt making):—"Under the mud of this lake, a stratum of carbonate of soda deposits. The water is clear, its specific gravity is 1·02765, or nearly equal to that of the water of the ocean. The water has no disagreeable smell, but the mud is saturated with sulphuretted hydrogen." (*N. B.*—This will account for the unpleasant odour, which ordinary observers attribute to the water itself.) The carbonate accumulates slowly under the mud; it consists of—

Soda	Na_2O	40·9
Carbonic acid	CO_2	38·0
Water	HO	20·6
Insoluble matter		0·5
Sulphate of soda	$Na_2O.SO_3$	trace.
		100·0

Says the report,

tendered as to the quantity of Dhulla Khar annually produced; and as this was obviously the first thing requisite to be known, the Collector was told to arrange for weighment, at the post of Sindkhera, in which Customs Subdivision the Lake is situate, of all despatches of Dhulla Khar, and for collection of duty on any excess of salt therein. An objection having been raised by the Commissioner of West Berar, on the score of interference with the contractor, to our examination at the place above named, the Collector was directed to arrange for mere weighment at Lonar itself, where we had recently stationed a Sub-Assistant Patrol. Unfortunately, by the time this latter order reached the Collector (and with the Commissioner and Deputy Commissioner detained in Rajpootana, and the Collector on tour in one of the most inaccessible portions of his charge, a certain delay was inevitable) the gathering of Dhulla Khar for the season was over; and the opportunity of determining whether the substance should be declared liable to taxation was thus lost.

although temporarily frustrated,

will ultimately enable a decision to be arrived at.

22. It might be impolitic, and would almost certainly be contrary to the views of the local authorities, to interfere with the terms of the present contract, which, as noted, will expire in November 1871, but between this and then there will be ample leisure to determine by weighment on the spot of every despatch which leaves the Lake, whether ground exists for recommending a modification or, in extremity, withdrawal, of the contract when its term runs out.

HEDGE.

23. No hedge has been raised along this Section; nor will it, as long as any kind of uncertainty as to permanence of present arrangements exists, be advisable to lay upon the now greatly diminished executive the labor (arduousness of which naturally increases as the number of hands available is lessened) of constructing a barrier of the kind, need of which, at the worst, may be held to terminate at about the Lonar Lake, or a very few miles beyond. No public works have been undertaken.

ESTABLISHMENT.

CASUALTIES.

Health of force.

24. The death-rate of the force has increased, from 1·43 per cent. in 1868-69 to 1·83 in 1869-70. Prevalence of cholera, to which were due twenty-one out of the twenty-three deaths which occurred, will account for the higher percentage. Seven men of the force, two jemadars and five peons, were punished by Criminal Courts for offences, none of which were of a very heinous type; while the Department had no reason whatever to question any of the grounds on which punishment was awarded.

NOTICE OF OFFICERS.

25. For activity in out-door duties, the officers serving on this Section have entitled themselves to be presented to the Resident as, for so much, meriting commendation. The lowest average, per diem, of excursions up and down the Line, that of Mr. A. G. Bradford, who is in charge of the very important Railway post of Mulkapoor, is still respectable, being 7·07 miles, while that of another officer, Mr. W. Clarke, 11·10 miles per diem, would have been excellent over the best ground we have, a description which applies to none of the sub-divisions in Berar. The active work of four other officers,—Messrs. Morley, Emmett, Glen, and Sufdur Ullee (mentioned in the order of amount of work done) is also very good; that of two others, Patrol Ahmed Oollah Khan and Officiating Assistant Patrol Lultapurshad, is very fair. It is to be regretted, however, that, of the European officers enumerated, not one has shown such attention to his office duties, as deducible from his annual report, as justifies this office in commending him without reserve. The public mention of this general shortcoming will, it is hoped, aid towards working a general and greatly needed amelioration.

(Sd.) F. W. VERE,
Deputy Commr., Inland Customs.

Appendix C.

Review of the Administration of the Internal Department of the Inland Customs, North-Western Provinces Section, for the Official Year 1869-70.

INTERNAL DEPT., N. W. P.

Beyond simple re-distribution of force in two circles, no change has occurred in the organization of this branch during the year now to be reviewed. Territorial area, population and executive force remain, respectively, at 61,895 square miles, 27,000,000 souls, and 883 officers and men.

Internal economy *practically unchanged.*

FINANCIAL RESULTS. GROSS REALIZATIONS.

2. The realizations of the year, under provisions of Act XXXI of 1861, from all sources, have been Rs. 84,447-15-7, against Rs. 80,790-0-6, showing, in favor of the year under discussion, an increase of Rs. 3,657-15-1, or 4·52 per cent.

Increase as compared with 1868-69.

3. The following table gives the income under each heading in comparison with the three preceding official years:—

YEAR.	Fees on Licenses.	Fines and Confiscations.	Duty on Salt.	TOTAL.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
1869-70 ...	39,475 8 0	162 14 1	44,809 9 6	84,447 15 7
1868-69 ...	45,387 0 0	568 0 1	34,835 0 5	80,790 0 6
1867-68 ...	50,843 0 0	261 5 11	35,929 7 7	87,033 13 6
Corresponding 12 months of 1866-67 ...	42,548 4 0	398 1 11	57,191 5 5	1,00,137 11 4

COLLECTIONS analyzed month by month.

4. Annexure A affords details of collections, month by month, for 1869-70 and for the immediately preceding year. The tendency throughout has been mostly towards increase; the realizations of four months only, April, October, January and March, falling below those of corresponding months in 1868-69. In the first of the four, the difference is too insignificant to require notice. In the second named, the decline, mainly in the item of Fees, is clearly to be traced to the unusually heavy rains of the month. Men would be slow to apply for licenses when, for some time to come, it was palpably impossible for them to begin work. In the third instance, fluctuation in the issue of licenses for sulphate of soda, in the circles of Futtehpore and Ghazeepore, was the principal influence; and again, in March, a similar symptom appearing in the Allygurh Circle, brought about the decrease then observable.

Collections by circles.

5. Annexure B is a comparative return of collections by circles. In connection with the two largest items in the "Decrease" column, it may be noted that the first, for the Allygurh Circle, refers purely to our own refusals to issue licenses, while the second, under Cawnpore, is apparent rather than real, being the result of a re-distribution of area, discussed in para. 72, Appendix I, of the Adminstration Report for 1868-69, and adopted in view to a more perfect control over tracts known to be dangerous.

Detail of salt destroyed.

6. Only maunds 84-35-6 of salt have, during the year under consideration, been destroyed as too impure for sale. This quantity, which represents Rs. 254-10-5 of duty, is but 14·55 on the average of three preceding years. The difference in which there is nothing to lament, is perhaps not disconnected with the decidedly bettered condition of the saltpetre trade, of which we have one proof in the larger quantity of salt capable of yielding duty turned out during the year.

Analysis of receipts.

7. During this year while we have lost principally by our own defensive action* (*vide* para. 5) on fees for licenses, a sum of Rs. 5,911-8-0 equal to 13·02 per cent. on the preceding year's receipts, we have gained Rs. 9,974-9-1, or 28·63 per cent. in duty on salt. Fines and confiscations are purely matter of accident, and their entire sum, even at their largest, is always unimportant.

CHARGES.

Percentage on totals of 1868-69.
increase.
Fixed charges.
increase.
Contingencies.
decrease.

8. The charges of 1869-70, of which details are furnished in the following table, amount to Rs. 1,98,005-9-8, being Rs. 20,212-11-9, or 11·36 per cent. in excess of those of 1868-69. Fixed charges exceed those of the latter year by Rs. 23,023-14-3, or 14·42 per cent., while contingencies are less by Rs. 2,811-2-6, or 15·49 per cent. than the corresponding charges of the same year.

* Refusals to license.

YEAR.	FIXED.				CONTINGENCIES.								
	SUPERVISION.	PREVENTION.		Total of Fixed.	Travelling allowance other than that fixed for Deputy Inspectors.	Conveyance of weighing apparatus and tents, &c.	Pay of Peons sick in Hospital.	Postage Labels.	Dieting of Prisoners.	Half fines as per sentences of Courts.	Miscellaneous.	Total of Contingencies.	Grand Total of Charges.
	Deputy Commissioner, Assistant Commissioner and Office.	Officers, Deputy Inspectors, and Sub-Deputy Inspectors.	Men.										
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
1869-70 ...	33,578 9 7	64,310 5 3	84,790 3 9	1,82,679 2 7	3,141 6 1	1,973 14 7	176 13 10	2,126 7 0	46 7 0	4,113 7 0	3,747 15 7	15,326 7 1	1,98,005 9 8
1868-69 ...	32,109 10 9	57,512 0 0	70,033 9 7	1,59,655 4 4	1,611 9 10	1,380 5 5	51 12 2	2,943 9 6	31 14 9	1,270 15 2	10,847 6 9	18,137 9 7	1,77,792 13 11
1867-68 ...	29,841 11 8	51,954 9 11	66,463 10 5	1,48,260 0 0	810 8 3	838 14 9	...	2,690 8 0	61 1 6	939 9 5	2,880 5 2	8,220 15 1	1,56,480 15 1
Corresponding 12 months of 1866-67.	29,596 5 6	47,993 9 8	71,400 0 6	1,48,989 15 8	869 10 8	628 11 8	...	1,694 4 6	154 1 9	972 0 6	2,358 2 2	6,676 15 3	1,55,666 14 11

N. B.—In these Internal Reports, no notice is taken, on either side of the account, *i. e.*, Realizations or in Charges, of Income Tax or Subscriptions to Funds,—hence these figures differ somewhat from those of the Commissioner, in which such items are brought into account.

Increase in Fixed, *explained.*

9. The addition to fixed charges represents the developed re-action, in an entire year, of the increased scale of salaries. In 1868-69, there were but seven months brought to account on this higher scale, which has now regulated the outlay of twelve, occasioning a proportionate increment of charge, that year being more expensive, under this heading, by 7·68 per cent. than 1867-68: while 1869-70 is, in turn, more costly than 1868-69 by 11·42 per cent It will be appropriate here to mention that a most careful scrutiny of the constitution of the Internal Force convinced the Commissioner that in it no reductions of strength were to be thought of.

Impossibility of reduction in Internal Force.

Contingencies.

Fluctuations explained.

10. Some fluctuations are discernible in comparison with 1868-69, in the items of which contingent charges are composed. Travelling allowances are in excess by Rs. 1,529-12-3, principally caused by a more lengthened residence in camp, on special duty, connected with establishment of licensed salt works in Jounpoor, of a superior officer (the Assistant Commissioner, Mr. Ray). Conveyance of weighing apparatus, tents, &c., is likewise in excess by Rs. 593-9-2, partly from the cause just mentioned, partly with reference to movements of subordinate officers, and to increasing cost of carriage. Pay of men sick in hospital, an item peculiarly subject to variation, is higher by Rs. 125-1-8, result of a season which, from April to August, was one of unusually intense heat, followed by floods of rain; conditions which could hardly fail to re-act upon the general health of a force, the duties of which entail great exposure. Dieting of prisoners, an item subject to much accident, is more by Rs. 14-8-3. Half fines (rewards to captors of persons convicted of breach of law) are in excess by Rs. 2,842-7-10, in consequence of a change of system, by which sums, formerly derived from the Courts which imposed the penalty, are now drawn in the contingent bills of this Department. On the other hand, *Postage*, another of those items which must fluctuate, is less by Rs. 817-2-6 from general causes, too much sub-divided over many offices, for identification. Miscellaneous charges, greatly swelled in 1868-69 by purchase of tents, are less by Rs. 7,099-7-2.

Increases.

Decreases

Increased Scale of pay forbids comparison with earlier years.

Net expenditure.

11. The radical difference which the introduction of a higher scale of pay has caused, will render superfluous any comparison with years when lower rates prevailed. The relation which charges bear to income has however to be exhibited in the following table :—

YEAR.	Gross Expenditure.	Realizations.	Net Expenditure.	Net Expenditure per mensem.	Percentage of Gross Expenditure on Income.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
1869-70	1,98,005 9 8	84,447 15 7	1,13,557 10 1	9,463 2 2	234·47
1868-69	1,77,792 13 11	80,790 0 6	97,002 13 5	8,083 9 1	220·07
1867-68	1,56,480 15 1	87,033 13 6	69,447 1 7	5,787 4 1	179·79
Corresponding 12 months of 1866-67... ...	1,55,666 14 11	1,00,137 11 4	55,529 3 7	4,627 6 11	155·45

Incidence of charges.

Progressive increase

12. These figures show a progressive increase in incidence charges, the explanation of which is simple. From 1866-67 to

1868-69, there was continuous depression of income, while, outlay, which in the two earlier years had remained much the same as when realizations were larger, made, in the latter of the three, a considerable advance under increased rates of pay. In 1869-70, those enlarged rates have still influenced the general expenditure, but an increase in income has come to lessen in a measure their natural re-action. It will be noted that the ratio of increase has been checked. In 1867-68, this was 21·34 per cent. greater than in 1866-67, in 1868-69, the comparative increase (with 1867-68) was 40·28 per cent., while in 1869-70, it is but 14·30 over that of the immediately preceding year. If the movement, now for nearly eighteen months perceptible in the saltpetre trade, and which (*vide* para. 29) has led to a very large increase in export of that staple during the official year, be maintained, we may, *subject however to such re-action on the salt market of these provinces as extension of Railway and successful issue of the experiments in local manufacture of salt are not ill qualified to bring about*, look to see the disproportion of internal income to internal charges, the aspect of which to superficial observance is any thing but encouraging, abate somewhat in future. But I am bound to acknowledge that in this matter I am not very hopeful, for the influences to which allusion is above made in italics, seem to me very capable of reducing the profits derivable from sale of salt, produced in refining saltpetre, and of stimulating the tendency known even now to exist among all but a few leading firms, to make quantity pay for quality, and to foist off, as saltpetre, as much salt as the mass can conveniently be made to carry. Such a practice, *per se*, is not likely to cause any perceptible injury to the salt revenue.

explained.

Has been recently checked,

and subject to certain chances.

will perhaps now decline.

13. In para. 20 of the last report on the Internal Branch of the Department, endeavour was made concisely to exhibit the real uses of the establishment in question, and the tests by which its value to the State must be gauged. The points then urged were far from novel, but had frequently been advanced, and as frequently accepted by Government as valid. Nevertheless, as embodying the *raison d'ètre* of an arrangement, always liable to be placed on its defence, a short recapitulation was then ventured on, and may, for the same reason, here also be tolerated in the still more condensed form of a reminder that the internal force is our one provision against widespread illicit production of salt, and that its worth lies not in what it directly produces, but in what it prevents.

PECULIARITIES OF THE INTERNAL BRANCH,

briefly noticed.

14. Annexure C presents, in abstract, a table of issue of licenses under Act XXXI of 1861, and of fees realized, together with statistics of increase and decrease, in comparison with 1868-69. Its main features are a considerable increase (1,052) in crude saltpetre works, which, remembering that 1868-69 exceeded its preceding year by a still larger figure, does warrant the idea that the trade is in reality reviving. But, with all the progress of the past two years, we have still little more than half of the factories that were at work in 1862-63 (about 10,000), the difference being debitable to the export duty on saltpetre, against which, from the first, this Department protested. Refineries of saltpetre have also increased by thirteen, but the same reflexion applies, for we had 400, where we have 158. Works for sujjee and russee (forms of carbonate of soda) have declined, from subsidence of demand, to what may be regarded as normal limits. Those for sulphate of soda have retrograded by no motive of their own, but under our determination

ISSUE OF LICENSES.

Crude saltpetre works *Increase.*

Inference deducible.

Increase in Refineries.

Decrease in works producing carbonates of soda.

Do. do. sulphate of soda.

not to license this most dangerous and objectionable class of works, except where we have some kind of assurance (at best but feeble) that our trust will not be abused. While on this subject, I may note that facts have come to light, which are now undergoing the most searching test that our resources permit us to apply, and which seem to show that the ineradicable addiction to salt-making of workers of this stamp, will render unavoidable an application of the rigor of our powers, in the shape of extensive refusals to license (*vide* also paras. 5 and 15).

Notice of current rumour in connection with the latter c'lss.

Analysis of issue by circles.

15. Annexure D exhibits details of these issues, for every kind of license, for each circle in the Provinces. The greatest increase in saltpetre works has taken place in Ghazeepore and Goruckpore, which, between them, account for 803 out of the 1,052 additional licenses of the year. Sulphate of soda works have lessened principally in Allygurh and Cawnpore, with some counterbalance in minor additions to the numbers in other circles.

LICENSES REFUSED.

Decrease in refusals

16. Annexure E shows the number of licenses refused in each circle during the year. The total is 335 against 773 in 1868-69. Were it possible to feel fairly assured that the more lenient policy of the later period had not been abused, there would be legitimate satisfaction in these figures. As already explained (para. 14), there is, however, cause for anxiety in this respect.

CASES OF WORKING WITHOUT LICENSES.

Decrease.

17. Annexure F gives also, circle by circle, the number of cases in which saline factories have been discovered working without license, and of committals to Criminal Courts in consequence. There is a considerable decrease in the latter item in 1869-70, 82 persons having been taken into Court against 129 in the preceding year, on which we may, on the whole, afford to be congratulated.

ILLICIT MANUFACTURE OF SALT

seems not to increase.

Increase in cases *explained.*

Decrease in quantity of salt,

and in persons captured.

18. In the statistics of the year connected with illicit manufacture, there is (apart from the as yet unsubstantiated intimations alluded to in paras. 14,16 and 40) nothing to lead us to think that the practice is gaining ground. Cases, it is true, show a considerable increase (1,069 in 1869-70 against 609 in 1868-69), but this is attributable to an altered and more accurate method of bringing these to account. In quantity of salt seized, and in persons captured, there is a decrease, which now endures from year to year.

PENAL ACTION OF THE DEPARTMENT.

19. The appended table gives details connected with seizures for illicit manufacture for 1869-70 and three preceding years.

NAME OF CIRCLE.	Cases of Seizure.				Quantity of Salt.				Men Seized.			
	1866-67.	1867-68.	1868-69.	1869-70.	1866-67.	1867-68.	1868-69.	1869-70.	1866-67.	1867-68.	1868-69.	1869-70.
					M. S. C.	M. S. C.	M. S. C.	M. S. C.				
Agra	13	8	11	26	0 20 6	3 15 15	11 23 12	3 24 7	56	26	15	54
Allygurh	58	24	26	43	97 34 5	76 34 0	81 21 5½	80 17 2½	243	105	71	81
Boolundshuhur	31	11	1	1	34 3 9	9 1 10½	13 30 0	.....	92	13	1	1
Budaon	43	16	17	22	2 19 5	1 2 10½	2 28 14	1 34 4	97	20	23	29
Mynpoorie	71	49	57	53	31 28 8½	377 1 5½	13 39 5½	11 19 8	226	233	96	60
Furruckabad	75	32	41	69	36 9 10	6 39 9½	5 17 9	29 20 5	160	50	62	102
Cawnpore	79	79	57	19	15 22 5	18 0 4	57 12 15	8 4 3	297	275	188	21
Futtehpore	31	18	3	19	0 10 6	0 8 1	0 20 8	1 22 14½	44	23	5	23
Allahabad	160	107	98	158	22 1 12	5 3 15	15 9 10	11 35 5	367	180	235	180
Jounpore	223	148	183	490	22 25 6	12 27 9	23 2 13½	18 30 4	988	471	493	490
Ghazeepore	168	106	95	120	5 38 6	3 21 13	4 39 7	6 32 11½	269	130	136	110
Goruckpore	63	25	20	43	0 36 8	0 13 5	0 18 5½	1 19 15	83	25	21	44
TOTAL ...	1,015	623	609	1,063	270 10 6½	514 10 2	230 24 9	175 20 15½	2,922	1,551	1,376	1,225

PERSONS CAPTURED.

Progressive decrease.

20. The feature of greatest interest is the number of persons captured by the Department. We have 1,225 in 1869-70, against 1,376 in 1868-69, 1,551 in 1867-68, and 2,922 in 1866-67, or decreases, in respective comparison of results of 1869-70, of 10·91, 21·01 and 58·07 per cent. These represent the effect of the more lenient procedure introduced under Government Order, North-Western Provinces, No. 152 A of 9th October 1867, the influence of which, but partially evident in 1867-68, was better developed in the following year. Beyond noticing the fact that most of our own officers who at first foretold nought but evil from the change, seem, under practical familiarity with its results, to grow reconciled to it—it appears superfluous further to discuss a reform, the beneficial tendencies of which have been fairly proved. No one whose opinion has the slightest weight, would now advocate return to the more rigorous practice of our earlier days. Glancing at the table, it will be seen that the Jounpore Circle, where so many of the population are inveterate salt makers, still holds an evil pre-eminence, yielding, from its comparatively small area of 2,547 square miles, and population of 1,814,848 souls (representing, respectively, about 4·11 and 6·72 per cent. of the area and population with which the Internal Branch is concerned) no less than 40 per cent. of all of those with whom, during the year under review, the Department has been compelled to interfere. The next table shows the kinds of factories, &c., in which seizures have been effected during the year.

result of a more lenient system.

Kinds of seizures.

OF THE INLAND CUSTOMS, N. W. P. SECTION, FOR 1869-70.

NAME OF CIRCLE.	Crude Saltpeter Works.	Refineries.	Kharee Works.	Russee Works.	Sujjee Works.	Domestic Manufacture.	Total.
	No. of Seizures.	No. of Seizures.	No. of Seizures.	No. of Seizures.	No. of Seizures.	No. of Seizures.	
Agra	7	.....	.....	.....	.....	19	26
Allygurh	17	.....	24	.....	.....	2	43
Boolundshuhur	1	.....	.....	.....	.....	.....	1
Budaon	21	.....	1	.....	.....	.....	22
Mynpoorie	34	.....	.....	.....	.....	19	53
Furruckabad	40	.....	11	1	.....	17	69
Cawnpore	18	.....	.....	.....	.....	1	19
Futtehpore	10	1	6	.....	.....	2	19
Allahabad	71	.....	13	.....	.....	74	158
Jounpore	45	.....	11	.....	.....	434	490
Ghaẓeepore	97	.....	3	.....	.....	20	120
Goruckpore	43	.....	.....	.....	.....	.....	43
TOTAL ...	404	1	69	1	.....	588	1,063

Proportion of criminal prosecutions to captures.

21. Out of the 1,225 persons shown as captured in the preceding table, 648, or 52·89 per cent., were criminally prosecuted, the remainder escaping with, at worst, destruction of such salt as they had illicitly made. Our action in the Criminal Courts has therefore affected but the very low percentage of 0·0024 on the twenty-seven millions of population who live within the area over which the operations of our internal force extend. In other words we have prosecuted *one* out of every 41,666 in the population, not, be it remembered, of the North-Western Provinces in their entirety, for there are districts which we leave to themselves, but of a certain area therein.

Percentages on population, of persons prosecuted.

Captures, prosecutions and results, *analyzed by circles.*

22. The subjoined table shows the number of persons captured in each Circle; how these were dealt with ; and the final issue of our prosecutions in Court.

OF THE INLAND CUSTOMS, N. W. P. SECTION, FOR 1869-70.

YEAR.	Total number of persons captured by the Department.	RELEASED BY DEPARTMENT.				Pending investigation of the Department.	Sent for trial.	Acquitted.	Convicted.	Pending when report was submitted	Percentage of convictions on number of persons sent for trial, deducting those whose cases were still pending.
		For making less than one seer.	Infirm persons, pregnant women or minors.	On proof of ignorance or inadvertence.	For want of proof.						
1869-70.											
Agra	54	2	...	...	7	...	45	12	33	...	73·33
Allygurh	81	6	...	5	35	...	35	8	27	...	77·14
Boolundshuhur	1	...	...	...	1	...	...	...	...	...	...
Budaon	29	4	...	6	9	1	9	...	6	3	100·00
Mynpoorie	60	7	...	...	11	...	42	3	39	...	92·85
Furruckabad	102	19	2	...	5	...	76	5	71	...	93·42
Cawnpore	21	6	1	...	2	...	12	...	12	...	100·00
Futtehpore	23	11	1	...	3	...	8	3	5	...	62·50
Allahabad	180	31	...	...	6	...	143	24	94	25	79·66
Jounpore	490	248	22	...	18	...	202	11	181	10	94·27
Ghazeepore	140	56	...	...	16	8	60	1	42	17	97·67
Goruckpore	44	26	...	...	2	...	16	5	8	3	61·53
TOTAL ...	1,225	416	26	11	115	9	648	72	518	58	87·79
1868-69.											
Agra	45	8	1	...	7	...	29	13	16	...	55·17
Allygurh	71	4	1	...	24	...	42	15	27	...	64·28
Boolundshuhur	1	...	...	...	...	...	1	...	1	...	100·00
Budaon	23	2	...	...	2	...	19	12	7	...	36·84
Mynpoorie	96	8	...	...	15	...	73	20	53	...	72·60
Furruckabad	62	14	...	...	7	...	41	7	34	...	82·92
Cawnpore	188	11	...	1	66	...	110	34	76	...	69·09
Futtehpore	5	1	...	...	...	...	4	2	2	...	50·00
Allahabad	235	29	...	...	12	...	194	42	152	...	78·35
Jounpore	493	187	6	...	57	...	243	46	197	...	81·06
Ghazeepore	136	36	...	...	15	...	85	18	67	...	78·82
Goruckpore	21	11	...	...	1	...	9	1	8	...	88·88
TOTAL ...	1,376	311	8	1	206	...	850	210	640	...	75·29
1867-68.											
Agra	26	...	...	...	...	...	26	16	10	...	38·46
Allygurh	105	...	...	1	36	...	68	27	41	...	60·29
Boolundshuhur	13	...	...	...	8	...	5	1	4	...	80·00
Budaon	20	...	...	1	4	...	15	5	10	...	66·66
Mynpoorie	233	...	...	...	20	...	213	93	120	...	56·33
Furruckabad	50	2	...	...	6	...	42	5	37	...	88·09
Cawnpore	275	13	...	...	52	...	210	101	109	...	51·90
Futtehpore	23	...	...	2	7	...	14	3	11	...	78·57
Allahabad	180	17	...	...	32	...	131	19	112	...	85·49
Jounpore	471	43	...	...	65	...	363	111	252	...	69·42
Ghazeepore	130	24	...	...	9	...	97	25	72	...	74·22
Goruckpore	25	...	...	...	2	...	23	1	22	...	95·65
TOTAL ...	1,551	99	...	4	241	...	1,207	407	800	...	66·28

Proportion of convictions to prosecutions.

23. There are always a few cases, the result of which is unknown when this Report has to be written; and in the present instance the number 58 is considerable. Taking, however, ascertained results, the percentage of successful prosecutions is respectable, amounting to 87·79 per cent. We may reasonably look to see this increase when the whole year's work can be collated; and already the results, as they stand, are better by 12·50 per cent. than those of 1868-69, while they leave those of 1867-68 behind by no less than 21·51 per cent. The improvement is evidence of increasing care on the part of our Heads of Circles in scrutinizing cases before committing such for trial. In one Circle with twelve committals the maximum of cent. per cent. has been attained, in four others the highly respectable percentages, 92·85, 93·42, 94·27, and 97·67 are recorded, while the worst result of the year, 61·53, is still by 24·69 per cent. in advance of the least satisfactory return of 1868-69.

Results as compared with 1868-69.

Shows that cases are more carefully prepared.

Causes of releases in Court.

24. The following table shows the causes assigned during the year for dismissals of cases by the District Courts by which these were tried :—

NAME OF DISTRICT.	CAUSES OF ACQUITTAL.							REMARKS.
	Want of proof.	Impurity of substance seized.	Non-attendance of Witnesses.	Discrepancies in evidence of Customs men.	False report by Informers.	Absconding of accused.	TOTAL.	
Agra ...	8	...	...	...	...	...	8	Of these the Court did not summon 6 persons.
Muttra ...	4	...	...	..	...	...	4	Do. do. 2 ditto.
Allyghur ...	1	...	...	...	...	...	1	
Etah ...	7	...	...	..	...	...	7	Do. do. 4 ditto.
Etawah ...	2	...	...	...	...	1	3	
Furruckabad ...	5	...	...	...	...	...	5	Do. do. 1 ditto.
Futtehpore ...	3	...	...	...	...	...	3	
Allahabad ...	19	...	...	2	...	2	23	
Mirzapore ...	1	...	...	...	...	...	1	
Jounpore ...	8	...	1	...	...	1	10	
Benares ...	1	...	...	...	...	...	1	
Azimgurh ...	1	...	...	...	...	...	1	
Goruckpore ...	..	...	3	...	...	1	4	
Bustee ...	1	...	...	...	...	...	1	
TOTAL ...	61	...	4	2	...	5	72	

It will be remarked that out of 72 dismissals, 61 are for want of proof. It is perhaps not too much to say that, were the decisions susceptible of appeal to higher tribunals, it is probable that in a large proportion a different view would be taken.

Details of punishments awarded by Courts.

25. In the next table, the various punishments undergone by persons criminally convicted are detailed.

OF THE INLAND CUSTOMS, N. W. P. SECTION, FOR 1869-70.

YEAR.	Imprisoned in Default of Payment of Fine.									Paid Fines.								
	No. imprisoned for 6 months.	No. imprisoned above 3 months.	Above 2 months.	Above 1 month.	Above 15 days.	Above 10 days.	Below 10 days.	Total who underwent imprisonment.	Above Rs. 100 and below Rs. 250.	Aggregate paid.	Above Rs. 50 and below Rs. 100.	Aggregate paid.	Above Rs. 30 and below Rs. 50.	Aggregate paid.	Above Rs. 20 and below Rs. 30.	Aggregate paid.	Above Rs. 10 and below Rs. 20.	Aggregate paid.	Above Rs. 5 and below Rs. 10.	Aggregate paid.	Below Rs. 5.	Aggregate paid.	Total who paid fines.	Aggregate paid.
1869-70.																								
Agra	...	4	9	13	...	...	...	26	...	.....	...	.....	...	.....	...	.....	2	50 0 0	5	25 0 0	...	.....	7	45 0 0
Allygurh	...	3	8	8	...	...	...	14	...	.....	...	.....	...	30 0 0	...	60 0 0	5	62 1 3	3	13 0 0	1	2 0 0	13	109 1 3
Boolundshuhur	...	...	...	...	...	...	...	...	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....
Budaon	...	...	...	...	1	...	...	2	...	.....	...	.....	...	.....	1	25 0 0	...	10 0 0	2	10 0 0	...	.....	4	45 0 0
Mynpoorie	...	...	1	...	...	...	...	1	...	.....	...	.....	...	.....	...	65 0 0	1	178 5 0	12	60 0 0	...	8 1 0	30	361 6 0
Furruckabad	...	...	9	9	1	...	...	12	...	.....	1	50 0 0	3	.....	...	.....	14	290 0 0	15	82 0 0	17	36 0 0	39	498 0 0
Cawnpore	...	...	4	7	...	...	...	2	...	.....	...	.....	...	.....	...	.....	27	25 0 0	1	5 0 0	...	.....	10	305 0 0
Futtehpore	...	...	1	1	...	...	...	1	...	.....	...	100 0 0	...	65 0 0	2	60 0 0	2	20 0 0	3	15 0 0	...	0 2 0	4	35 2 0
Allahabad	...	...	...	1	...	...	...	1	...	.....	...	.....	...	.....	...	.....	...	.....	22	110 0 0	12	32 0 0	51	349 0 0
Jounpore	...	3	10	18	8	...	4	43	...	.....	...	.....	2	.....	15	340 0 0	15	461 0 0	33	167 0 0	31	84 3 0	120	1,152 3 0
Ghazeepore	...	8	20	32	...	1	1	61	1	100 0 0	...	.....	1	30 0 0	2	45 0 0	7	75 0 0	5	25 0 0	5	10 15 6	21	385 13 6
Goruckpore	...	...	2	2	1	...	...	5	...	200 0 0	...	.....	...	.....	...	.....	1	10 0 0	...	.....	2	4 8 8	3	14 8 8
Total ...	...	27	71	81	11	1	5	196	3	400 0 0	2	100 0 0	4	125 0 0	30	660 0 0	112	1,293 6 3	101	514 0 0	70	177 11 2	322	3,270 4 5
1868-69.																								
Agra	...	...	1	6	...	...	...	7	...	.....	...	.....	...	.....	...	.....	7	75 0 0	2	10 0 0	...	.....	9	85 0 0
Allygurh	...	1	4	7	...	...	...	13	...	.....	1	50 0 0	1	40 0 0	4	80 0 0	4	41 0 0	1	5 0 0	3	3 0 0	14	219 0 0
Boolundshuhur	...	...	...	...	...	...	...	...	...	.....	1	50 0 0	...	.....	...	.....	...	.....	...	.....	...	.....	1	50 0 0
Budaon	...	...	2	...	...	...	...	2	...	.....	...	.....	...	.....	1	20 0 0	4	40 0 0	...	.....	...	.....	5	62 10 0
Mynpoorie	...	10	6	5	...	...	...	21	1	108 3 2	4	200 0 0	...	.....	8	185 0 0	15	170 3 6	4	20 0 0	...	1 12 0	32	687 2 8
Furruckabad	...	...	6	5	...	...	...	11	...	.....	...	.....	...	.....	1	20 0 0	12	125 0 0	10	57 0 0	...	13 5 3	23	215 5 3
Cawnpore	...	...	4	9	1	...	...	14	...	.....	3	150 0 0	...	.....	4	85 0 0	13	140 0 0	26	134 9 11	15	33 12 11	62	563 6 10
Futtehpore	...	...	...	...	1	...	...	1	...	.....	...	.....	...	40 0 0	...	.....	1	10 0 0	...	.....	...	.....	1	10 0 0
Allahabad	...	...	.9	35	18	...	4	70	...	.....	...	.....	1	30 0 0	...	65 0 0	30	315 0 0	13	71 2 0	34	74 7 10	82	575 9 10
Jounpore	...	...	32	21	1	...	2	67	...	.....	...	.....	1	30 0 0	...	40 0 0	27	279 12 3	45	263 10 3	55	189 3 9	130	802 9 3
Ghazeepore	...	...	7	10	3	...	...	26	...	.....	1	55 0 0	...	.....	2	.....	6	60 0 0	16	86 0 0	18	42 12 9	41	243 12 9
Goruckpore	...	...	3	1	...	...	...	4	...	.....	...	.....	...	.....	...	.....	1	10 0 0	1	6 10 8	2	0 11 0	4	17 5 8
Total ...	1	32	74	99	24	...	6	236	1	103 3 2	10	505 0 0	4	140 0 0	24	515 0 0	130	1,265 15 9	119	654 0 10	127	361 10 6	494	3,529 14 3
1867-68.																								
Agra	...	...	1	...	...	...	...	1	...	.....	1	.....	...	.....	1	20 0 0	3	30 0 0	4	20 0 0	...	.....	9	121 0 0
Allygurh	...	2	...	7	3	...	...	12	1	100 0 0	2	140 13 4	5	150 0 0	5	60 0 0	6	70 0 0	5	25 0 0	10	16 13 0	29	502 10 4
Boolundshuhur	...	...	...	1	...	...	...	1	...	.....	1	50 0 0	...	.....	...	.....	...	.....	2	10 0 0	...	.....	3	60 0 0
Budaon	...	...	...	...	2	...	...	2	...	.....	...	.....	...	.....	3	60 0 0	11	130 3 6	2	10 0 0	...	3 14 0	8	108 14 0
Mynpoorie	...	14	10	10	...	...	...	39	...	200 0 0	2	144 0 0	...	193 5 6	7	155 0 0	19	90 0 0	19	98 9 11	34	135 8 0	81	1,053 1 0
Furruckabad	...	...	4	6	6	...	...	12	...	.....	1	50 0 0	6	.....	7	145 15 9	8	90 0 0	1	6 0 0	8	25 0 0	25	316 15 9
Cawnpore	...	...	1	1	...	...	...	2	...	.....	...	.....	3	90 0 0	6	115 0 0	28	319 8 0	...	.....	61	172 12 6	95	697 4 6
Futtehpore	...	3	1	1	...	...	...	5	...	.....	...	.....	...	.....	...	.....	4	40 0 0	2	14 13 6	...	.....	6	64 13 6
Allahabad	...	5	2	11	19	...	3	40	1	50 0 0	1	35 0 0	...	90 0 0	4	90 0 0	21	233 0 0	...	.....	45	108 14 7	72	516 14 7
Jounpore	1	2	13	80	31	...	21	148	...	.....	...	.....	1	20 0 0	1	20 0 0	18	206 12 6	22	127 0 0	63	151 8 0	104	565 4 6
Ghazeepore	2	3	7	4	4	1	2	23	...	.....	...	.....	...	.....	...	.....	6	64 0 0	9	45 8 0	34	56 7 9	49	165 15 9
Goruckpore	...	...	1	3	4	3	4	15	...	.....	...	.....	...	.....	...	.....	...	.....	1	6 0 0	6	8 1 0	7	13 1 0
Total ...	9	30	39	131	69	4	30	312	3	300 0 0	8	435 13 4	15	463 5 6	28	605 15 9	106	1,218 8 0	67	361 5 6	281	678 11 10	488	4,114 14 11

Proportion of persons who paid fines.
Incidence of fines.
Number who underwent imprisonment.

26. Out of the 518 persons whose cases are therein analysed, 322, or 62·16 per cent., preferring payment of a fine to loss of liberty, have to escape imprisonment, paid sums averaging Rs. 10-2-5 each. The remaining 196 went to jail.

Ancient reproach against the department,

palpably refuted.

27. In presence of such statistics as these, it is no longer possible for the long-cherished grievance against this Department, *viz.*, that its penalties ground down the very poorest of the population, to be advanced with any remnant of respect for consistency. Every one who knows anything of the condition of the really *poor*, knows that they never possess such sums as, with the majority of our departmental criminals, count for so little as to be relinquished in preference to enduring imprisonment, which (another fact worthy of notice) carries with it enjoyment of such provision, in food and clothing, as the really indigent never by any chance obtain for themselves. Another reason, not unworthy of remembrance, when considering facts like these, why a man of the classes with whom we deal must in reality be fairly well-to-do before he will pay down money to keep out of jail, is that his imprisonment implies but few of the evils elsewhere attendant upon incarceration. He loses no caste, is never, by any accident, put out of communion by his fellows, as would happen to him for offences against the unwritten laws of his tribe, none of his jail companions can after release make capital out of *him* (a common case in Europe) by threatening to publish the fact of his having been in jail; for most of those whose good-will is of value to him know it already, and think none the worse of him; nor is it a necessary consequence that, while he is in durance, his wife and children must starve. In fact, where one class, and the most troublesome, the makers of sulphate of soda, are concerned, the caste fellows of an imprisoned man will work his factory for his behoof. This is, in short, just one of those instances in which all English notions have to be put out of sight, before a just appreciation can be arrived at. If I have dwelt somewhat on the aspect of our cases, herein presented, it has been with recollection of the persistence with which accusations, such as above described, have, despite abundant refutation, been from time to time renewed. The features herein discussed are, be it remembered, *no accident of the year*, but common to a long series.

Overcrowding of jails,

no longer chargeable against us.

28. Another frequent reproach has been that we overcrowd jails; but if, as is not to be denied, we have, in the past, been open to such an allegation, we are now purging ourselves of it; for, in the present year, our recorded imprisonments average only six persons per jail for the thirty-one districts among which our force is divided; or, leaving averages, our largest imprisonment in any one Circle, has been of 61 persons, divided between two jails, those of Jounpore and Benares.

MISCELLANEOUS.

Condition of saltpetre trade, improved.

29. There has been sustained improvement in the saltpetre market. Prices have varied from Rs. 5-11-0 to Rs. 6-14-0 per maund, the lower rates, up to Rs. 6, prevailing only during about two and a half months at the beginning. The consequence may be seen in the following table. Exports from

Calcutta during 1869-70 have exceeded those of 1868-69 by maunds 1,69,550.

MONTH.	1867-68.	1868-69.	1869-70.
	Maunds.	Maunds.	Maunds.
April	67,703	65,062	63,880
May...	56,531	44,741	48,765
June	21,399	18,880	53,182
July	27,100	31,668	29,518
August	21,672	26,872	43,116
September	21,374	25,170	53,726
October	12,699	39,560	51,366
November	10,740	34,321	76,072
December	41,118	58,550	51,004
January	58,938	5,422	59,807
February	51,075	61,147	59,250
March	28,053	54,173	45,430
TOTAL ...	4,18,402	4,65,566	6,35,116

SALT CLEARED FROM BOND.

30. The quantity of salt cleared from bond in saltpetre refineries during 1869-70 has been maunds 3,077-23-2 in excess of the out-turn of 1868-69. *Vide* subjoined table.

Increase.

YEAR.	Salt educed in Refineries under Mooshriffs.	Duty thereon at Rs. 3 per maund.	Received under Contract.	Fractional Receipts.	TOTAL.
	Mds. S. C.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
1869-70	14,320 28 7	42,962 2 2	1,845 12 0	1 11 4	44,809 9 6
1868-69	11,243 5 5	33,729 6 5	1,104 1 9	1 8 3	34,835 0 5

CONTRACTS UNDER SECTION VII OF ACT XXXI OF 1861.

31. Fourteen refineries have worked under contract against nine last year, and the amount realized is Rs. 1,845-12-0, or 67·21 per cent. in excess of last year's realizations. None but petty refineries, chiefly in the Ghazeepore Circle, have worked under contract.

ATE OF SALT OF SALTPETRE made n Refineries.

32. Salt produced in saltpetre refineries has sold at much the same rates as last year, *viz.*, at from Rs. 3-4-0 to Rs. 4-8-0 per maund.

EASTERN SALTS.

Progress of.

33. A certain stimulus, supposed by the Assistant Commissioner to be the result of the opening of the chord line on the East Indian Railway, has apparently been imparted to the trade in eastern salt, as far as Ghazeepore.

SALINE TRADES.

Their condition.

34. Otherwise, in connection with saline trades, there has been no such movement as needs separate notice, beyond what will be found in para. 14 of the present Report.

ESTABLISHMENT. Casualties.

Year improved aspect.

35. Casualties among the Establishment, as exhibited in the subjoined table, assume a favorable aspect as compared with those of 1868-69. The death-rate is nominal; the percentage of dismissals (making every allowance for an improved mode of classification, whereby dismissals for misconduct, pure, are separated from simple lapses from absence, showing but 5·76 per cent.), has distinctly improved.

	Number of each Rank and Grade.								
	Sub-Deputy Inspectors.	Mohurrirs.	Mooshriffs.	Kotegushts.	Jemadars.	Peons.	Orderlies.	Total Subordinate Establishment.	Percentage of Total of each kind of casualty on Total Establishment.
Total Sanction	32	24	135	49	65	653	48	1006	
During the year died	...	...	...	...	...	1	...	1	0·09
Dismissed for misconduct	1	1	8	3	6	39	..	58	5·76
Failed to rejoin	...	...	...	..	...	13	...	13	1·29
Removed as unfit for Service ...	...	...	1	1	...	1	...	3	0·29
Resigned	1	4	...	...	1	23	...	29	2·88
TOTAL CASUALTIES ...	2	5	9	4	7	77	...	104	10·33
Percentage of Casualties on whole Force	...		...		...		...		10·33

Causes of dismissals in force.

Decrease of heinous offences.

36. Causes which have led to dismissals are shown in the next table. The most heinous of the classified offences, collusion, and falsification of records, form but 8·62 per cent. of the whole, against 15·51 of the more heinous types in 1868-69. No case of reception of bribes has been established against any of the force throughout the year.

CAUSES OF DISMISSALS IN FORCE.	Sub Deputy Inspectors.	Mohurrirs.	Mooshriffs.	Kotegushts.	Jemadars.	Lance Jemadars and Peons.	Orderlies.	TOTAL.
Collusion	...	...	1	...	...	...	...	1
Falsifying records and false reports ...	1	1	...	...	1	1	...	4
Reception of bribes	...	...	...	...	...	...	...	...
Unauthorized absence	...	...	2	...	1	13	...	16
Disobedience and disrespect to Officers	...	...	1	1	2	6	...	10
False returns of residence ...	...	...	...	...	...	1	...	1
Asking gratuities	...	...	...	...	...	...	...	...
Illegal seizures	...	...	...	...	1	1	...	2
Allowing escape of prisoners ...	...	...	...	...	...	1	...	1
Miscellaneous	...	...	4	2	1	16	...	23
GRAND TOTAL ...	1	1	8	3	6	39	...	58

Punishment, by Criminal Courts, of members of the Force.

37. Two Departmental servants, Mooshriffs (Excise Agents), have been punished during the year by Criminal Courts. The first case was connected with the duty of the man implicated being a charge of collusion, on which, after being sentenced to six months' imprisonment, he was released on appeal to Sessions Court. The second was one of theft from another of the force, entailing three months' imprisonment. Departmental dismissal followed in both instances. Offences against the public there have been none.

Absence of offences against the public.

OFFICERS.

Work done.

38. Sixteen officers have, from first to last, done duty during the year as Deputy Inspectors, although no more than twelve have been employed at any one time. Between them, these officers have traversed 21,874 miles, or an average of 1,822 each. This is slightly below the figure of last year;* but weather was often greatly against active movement, what with the frightful intensity of heat in May and June, and the unusually heavy rains of the later months of 1869. On the other hand, the visits to factories of kinds have increased from 8,073 to 13,316, testifying to a general activity of the most useful kind. It is, moreover, to be borne in mind that these gentlemen do much work not susceptible of measurement by the mile.

Subordinate Reports *contain nothing to reproduce.*

39. Subordinate Reports require no reproduction, for the reason advanced last year, *viz.*, that all details of the work have, as matter of discussion, been long ago exhausted.

Recasting of two circles *not sufficiently tested.*

40. Re-arrangements, discussed in paragraph 72 of the Report for 1868-69, aiming at bringing the makers of sulphate of soda in Cawnpore and Futtehpore under better supervision, have not yet had a sufficiently prolonged trial. The most natural result of concentrating force in a given area, in view to suppression of one particular illegality, is that, by reason of the feeling of hopelessness of escape which such a demonstration is qualified to engender among the people concerned, the illegality itself will decline, and consequent penal action diminish. This latter feature (lessening of penal action) is already largely apparent, for in the area concerned, but 44 persons have been captured, in 1869-70, against 193 in 1868-69. *Primâ facie*, then, this is just what might have been expected to follow. Cause and effect seem fairly in evidence; but what forbids our taking so consoling a conviction for granted, is the existence of a most disquieting rumour, communicated by the Assistant Commissioner of Customs in Oudh,† to the effect that certain of these sulphate of soda works have been sending large quantities of salt disguised with a little kharee (sulphate of soda) into Oudh. The matter is at present under special inquiry, one of our very best officers, possessing considerable Police experience, having been sent to the most specially indicated locality. Should Mr. Hay's information prove well founded (and we *know* this much that pseudo-sulphate of soda, containing such enormous percentages of edible salt as entitle the substance to be called by the latter name only, have been found circulating in Oudh), we shall simply suppress the works, and place it beyond the power of their owners to outwit us in future. Mr. Hay has been directed to co-operate, by placing owners or hawkers of this impure salt under as much pressure as will induce them to declare whence they derive their supplies.

Rumour connected with the tract in question.

Measures taken in consequence.

* 1,851 Miles.
† *Vide* also para. 14.

APPENDIX I
INTERNAL DEPT.,
1 9 1

OFFICERS

11. The officers who have in all ways done best during the year under review, combining activity in the field with such careful preparation of cases as has produced large percentages of convictions, are Messrs. Durant, Hardingham (who has rendered also good service in connection with the experimental salt works in Jounpore), Ashton (C. P.) and Howard. Mr. Browne has also done very well in active work. Mr. Adam, promoted to be Assistant Commissioner at Sambhur, although in charge of a Circle during a portion of the year, was mostly on special duty under the immediate orders of the Commissioner, with whom it will more appropriately rest to notice his work. Mr. Ray, Assistant Commissioner, what with Officiating as Collector of Customs at Agra during my own absence on leave, and with his selection for the special duty of setting afoot the new salt works in Jounpore, has also worked much under the eye of the Commissioner himself. But he has likewise done good service in supervision of work of Internal Circles, all of which, under the changes which recent enlargements have necessitated, are now, in the first instance, looked after by him.

CONCLUSION

42. Compared with earlier attempts, the present Report looks scant and meagre: but this is the unavoidable result of having year after year to write of the same subjects, which, as time goes on, tend to contract, rather than to develop or expand; thus rendering it impossible to write at much length, except on condition of traversing and re-traversing, without apparent benefit, ground already thoroughly explored.

F. W. VERE,

Deputy Commissioner, Inland Customs.

Annexure A.

Months.	Collections for 1868-69.			Total 1868-69.	Total 1869-70.	Collections for 1869-70.			Increase.	Decrease.
	Fees.	Fines on Factories and Sales.	Duty on Salt.			Fees.	Fines on Factories and Sales.	Duty on Salt.		
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
April	10,004 12 0	215 0 2	2,203 11 7	12,423 7 9	12,408 1 0	9,245 0 0	50 0 2	3,113 0 10	...	15 6 9
May	331 8 0	20 12 3	2,662 2 9	3,014 7 0	6,404 1 11	378 0 0	33 4 0	5,992 13 11	3,389 10 11	..
June	18 0 0	26 13 4	4,032 6 2	4,077 3 6	5,228 11 1	245 8 0	16 0 6	4,967 2 7	1,151 7 7	..
July	1,823 0 0	61 4 0	2,703 5 6	4,587 9 6	8,873 5 0	3,438 0 0	39 4 6	5,396 0 6	4,285 11 6	
August	1,034 0 0	12 10 3	1,577 4 0	2,623 14 3	3,583 14 7	1,024 0 0	9 6 0	2,550 8 7	960 0 4	.
September	493 0 0	7 7 0	1,987 14 6	2,488 5 6	3,275 14 3	214 0 0	5 6 3	3,056 8 0	787 8 9	...
October	2,628 8 0	7 5 2	2,426 8 0	5,062 5 2	3,238 0 2	1,170 0 0	0 4 0	2,067 12 2	...	1,821 5 0
November	3,925 8 0	211 6 11	2,453 12 4	6,590 11 3	6,912 8 9	4,439 0 0	3 8 0	2,470 0 9	321 13 6	
December	3,015 8 0	0 8 0	2,486 11 5	5,502 11 5	6,457 6 6	4,807 0 0	0 12 0	1,649 10 6	954 11 1	..
January	4,947 0 0	2 0 0	2,765 4 6	7,714 4 6	5,899 14 8	3,012 8 0	2 1 8	2,885 5 0	...	1,814 5 10
February	3,852 0 0	1 6 0	2,685 10 4	6,539 0 4	7,275 8 11	4,067 8 0	1 9 0	3,206 7 11	736 8 7	.
March	13,314 4 0	1 7 0	6,850 5 4	20,166 0 4	14,890 8 9	7,435 0 0	1 6 0	7,451 2 9	..	5,275 7 7
Total ...	45,387 0 0	568 0 1	34,835 0 5	80,790 0 6	84,447 15 7	39,475 8 0	162 14 1	41,809 9 6	12,587 8 3	8,929 9 2
Deduct Decrease	...	...	...	...	...	...	...	...	8,929 9 2	
Net Increase	...	...	...	...	...	..		..	3,657 15 1	

F. W. VERE,
Deputy Commissioner, Inland Customs.

Annexure B.

Annual Comparative Statement of Departmental Collections for 1869-70.

Name of Collectorates	Amount of Collections in 1868-69.	Amount of Collections in 1869-70.	Increase.	Decrease.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Agra ..	1,691 10 7	1,989 10 0	297 15 5	... ..
Allygurh .	19,254 12 5	13,554 4 1	.....	5,700 8 4
Boolundshuhur... ...	1,972 3 7	2,211 7 9	239 4 2	...
Budaon ...	2,875 1 0	2,743 0 3	.....	132 0 9
Mynpoorie	4,682 8 4	3,904 13 0	.....	777 11 4
Furruckabad..	17,038 2 7	23,173 11 4	6,135 8 9	. ...
Cawnpore	15,465 11 5	11,146 12 0	.....	4,318 15 5
Futtehpore .. .	1,150 10 6	8,061 12 6	6,611 2 0	. . ..
Allahabad	5,495 13 5	6,046 3 10	550 6 5	.....
Jounpore	3,204 5 7	1,609 14 8	.....	1,594 6 11
Ghazeepore	5,919 14 11	7,330 3 3	1,410 4 4	.....
Goruckpore	1,739 2 2	2,676 2 11	937 0 9	.....
TOTAL ...	80,790 0 6	84,447 15 7	16,181 9 10	12,523 10 9
Deduct Decrease ...	...	.. ...	12,523 10 9	.....
Net Increase		.. ...	3,657 15 1	.....

F. W. VERE,
Deputy Commissioner, Inland Customs.

Annexure C.

NUMBER AND DESCRIPTION OF WORKS IN 1868-69.	LICENSES ISSUED IN 1868-69					LICENSES ISSUED IN 1869-70.									
	Fees.	Duplicate Licenses.	Fees.	TOTAL.		No. and description of works in 1869-70.	Fees.	Duplicate Licenses.	Fees.	TOTAL.		INCREASE.		DECREASE.	
				No. of Licenses issued.	Fees.					No. of Licenses issued.	Fees.	No. of Licenses.	Fees.	No. of Licenses	Fees.
4,738 Crude Saltpetre Works ...	9,476 0 0	36	18 0 0	4,774	9,494 0 0	5,796	11,592 0 0	30	15 0 0	5,826	11,607 0 0	1,052	2,113 0 0	...	.....
931 Sujjee do.	1,862 0 0	4	2 0 0	935	1,864 0 0	504	1,008 0 0	...	.....	504	1,008 0 0	...	.....	431	856 0 0
327 Russee do.	654 0 0	...	.....	327	654 0 0	205	410 0 0	1	0 8 0	206	410 8 0	...	.....	121	243 8 0
1,040 Kharee do.	26,000 0 0	4	25 0 0	1,044	26,025 0 0	743	18,575 0 0	2	12 8 0	745	18,587 8 0	...	.....	299	7,437 8 0
7,036 TOTAL ...	37,992 0 0	44	45 0 0	7,080	38,037 0 0	7,248	31,585 0 0	33	28 0 0	7,281	31,613 0 0	1,052	2,113 0 0	851	8,537 0 0
Deduct Increase	.....	...	.....	...	.....	...	.....	...	.....	...	.....		.....	...	2,113 0 0
Net Decrease	.....	...	.....	...	...	...	.....	...	.....	...	.....	...	.....	...	6,424 0 0
145 Refineries	7,250 0 0	...	.....	145	7,250 0 0	157	7,850 0 0	1	12 8 0	158	7,862 8 0	13	612 8 0	Deduct Increase	612 8 0
GRAND TOTAL OF CRUDE WORKS AND REFINERIES ...	.....	...	.....	...	*45,287 0 0	...	.....	..	.....	...	39,475 8 0	Net Decrease		...	5,811 8 0

* These figures differ by Rs. 100 from those given in the Table to para. 3. *Vide* footnote in Annexure D for the last year's Annual Report.

F. W. VERE,
Deputy Commissioner, Inland Customs.

Annexure D.

NAMES OF CIRCLES.	DESCRIPTION OF WORKS	1868-69.				TOTAL.		1869-70.				TOTAL.		INCREASE.		DECREASE.	
		Number of Licenses.	Fees.	Number of Duplicate Licenses.	Fees	Licenses.	Fees.	Number of Licenses.	Fees.	Number of Duplicate Licenses.	Fees.	Licenses.	Fees.	Number of Licenses.	Fees.	Number of Licenses.	Fees.
AGRA	Crude Saltpetre ..	212	424 0 0	2	1 0 0	214	425 0 0	178	356 0 0	1	0 8 0	179	356 8 0	..	.....	35	68 8 0
	Russee	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	.....
	Kharee	4	100 0 0	...	.....	4	100 0 0	...	.....	...	.....	...	.....	...	.....	1	100 0 0
	Refineries	216	524 0 0	2	1 0 0	218	525 0 0	178	356 0 0	1	0 8 0	179	356 8 0	..	.....	39	168 8 0
		8	400 0 0	.	.....	8	400 0 0	9	450 0 0	...	.....	9	450 0 0	1	50 0 0	..	.....
		...	.....	...	.....	..	925 0 0	..	.....	...	.....	.	806 8 0	...	50 0 0	.	168 8 0
ALLYGURH	Crude Saltpetre	604	1,208 0 0	8	4 0 0	612	1,212 0 0	648	1,296 0 0	2	1 0 0	650	1,297 0 0	38	85 0 0		...
	Russee	...	.....	...	.....	..	.....	...	.....	...	.....	...	.....	...	.....	..	.....
	Kharee	466	11,650 0 0	2	12 8 0	468	11,662 8 0	132	3,300 0 0	...	.....	132	3,300 0 0	...	.....	336	8,362 8 0
	Refineries	1,070	12,858 0 0	10	16 8 0	1,080	12,874 8 0	780	4,596 0 0	2	1 0 0	782	4,597 0 0	38	85 0 0	336	8,362 8 0
		33	1,650 0 0	...	.....	33	1,650 0 0	35	1,750 0 0	...	.....	35	1,750 0 0	2	100 0 0	..	.....
		...	.....	...	.....	...	14,524 8 0	...	.....	...	.....	...	6,347 0 0	...	185 0 0	...	8,362 8 0
BOOLUNDSHUHUR ...	Crude Saltpetre	73	146 0 0	...	.....	73	146 0 0	91	182 0 0	...	.....	91	182 0 0	18	36 0 0	...	.....
	Kharee	61	1,525 0 0	...	.....	61	1,525 0 0	65	1,625 0 0	...	.....	65	1,625 0 0	4	100 0 0	...	.....
	Refineries	134	1,671 0 0	...	.....	134	1,671 0 0	156	1,807 0 0	...	.....	156	1,807 0 0	22	136 0 0	...	.....
		2	100 0 0	...	.....	2	100 0 0	1	50 0 0	1	12 8 0	2	62 8 0	...	.....	...	37 8 0
		...	.....	...	.....	...	1,771 0 4	...	.....	...	.....	...	1,864 8 0	...	136 0 0	...	37 8 0
BUDAON	Crude Saltpetre	382	764 0 0	...	.....	382	764 0 0	432	864 0 0	5	2 8 0	437	866 8 0	55	102 8 0	...	.....
	Russee	97	194 0 0	...	.....	97	194 0 0	134	268 0 0	...	.....	134	268 0 0	37	74 0 0	...	.....
	Kharee	57	1,425 0 0	...	.....	57	1,425 0 0	44	1,100 0 0	...	.....	44	1,100 0 0	...	.....	13	325 0 0
	Refineries	536	2,383 0 0	...	.....	536	2,383 0 0	610	2,232 0 0	5	2 8 0	615	2,234 8 0	92	176 8 0	13	325 0 0
		5	250 0 0	...	.....	5	250 0 0	4	200 0 0	...	.....	4	200 0 0	...	.....	1	50 0 0
		...	.....	...	.....	...	2,633 0 0	...	.....	...	.....	...	2,434 8 0	...	176 8 0	...	375 0 0
MYNPOORIE	Crude Saltpetre	465	930 0 0	7	3 8 0	472	933 8 0	456	912 0 0	5	2 8 0	461	914 8 0	...	.....	11	19 0 0
	Russee	114	228 0 0	...	.....	114	228 0 0	27	54 0 0	...	.....	27	54 0 0	...	.....	87	174 0 0
	Kharee	16	400 0 0	...	.....	16	400 0 0	26	650 0 0	...	.....	26	650 0 0	10	250 0 0	...	.....
	Refineries	595	1,558 0 0	7	3 8 0	602	1,561 8 0	509	1,616 0 0	5	2 8 0	514	1,618 8 0	10	250 0 0	98	193 0 0
		14	700 0 0	...	.....	14	700 0 0	14	700 0 0	...	.....	14	700 0 0	...	.....	...	.....
		...	.....	...	.....	...	2,261 8 0	...	.....	...	.....	...	2,318 8 0	...	250 0 0	...	193 0 0
FURRUCKABAD ...	Crude Saltpetre	530	1,060 0 0	6	3 0 0	536	1,063 0 0	544	1,088 0 0	2	1 0 0	546	1,089 0 0	10	26 0 0	...	.....
	Russee	27	54 0 0	...	.....	27	54 0 0	23	46 0 0	...	.....	23	46 0 0	...	.....	4	8 0 0
	Kharee	42	1,050 0 0	...	.....	42	1,050 0 0	46	1,150 0 0	2	12 8 0	48	1,162 8 0	6	112 8 0	...	.....
	Refineries	599	2,164 0 0	6	3 0 0	605	2,167 0 0	613	2,284 0 0	4	13 8 0	617	2,297 8 0	16	138 8 0	4	8 0 0
		28	1,400 0 0	...	.....	28	1,400 0 0	28	1,400 0 0	...	.....	28	1,400 0 0	...	.....	...	.....
		...	.....	...	.....	..	3,567 0 0	...	.....	...	.....	...	3,697 8 0	...	138 8 0	...	8 0 0

CAWNPORE ...	Crude Saltpetre	...	...	404	808	0	0	2	1	0	0	406	809	0	0	386	772	0	0	3	1	8	0	389	773	8	0	...	.....	17	35	8	0
	Sujjee	...	...	8	16	0	0	...	.....			8	16	0	0	...	.....			...	.....			...	.....			...	.....	8	16	0	0
	Russee	...	...	59	118	0	0	...	.....			59	118	0	0	21	42	0	0	1	0	8	0	22	42	8	0	...	.....	37	75	8	0
	Kharee	...	...	259	6,475	0	0	1	6	4	0	260	6,481	4	0	120	3,000	0	0	...	.....			120	3,000	0	0	...	.....	140	3,481	4	0
				730	7,417	0	0	3	7	4	0	733	7,424	4	0	527	3,814	0	0	4	2	0	0	531	3,816	0	0	...	.....	202	3,6 8	4	0
	Refineries ..	...	...	18	900	0	0	...	.....			18	900	0	0	19	950	0	0	...	.....			19	950	0	0	1	50	0	0	...	... ..	
				...	.....			...	.....			...	8,324	4	0	..	.....			...	.....			...	4,766	0	0	...	50	0	0	...	3,698	4	0
FUTTEHPORE ...	Crude Saltpetre	...	..	146	292	0	0	...	.....			146	292	0	0	227	454	0	0	...	.....			227	454	0	0	81	162	0	0	...	... ..	
	Russee	...	...	30	60	0	0	...	... ..			30	60	0	0	...	.....			...	.....			...	.....			...	.....	30	60	0	0
	Kharee	...	...	...	.....			...	.....			...	.....			244	6,100	0	0	...	.....			244	6,100	0	0	244	6,100	0	0	...	.....	
				176	352	0	0	...	.....			176	352	0	0	471	6,554	0	0	...	.....			471	6,554	0	0	325	6,262	0	0	30	60	0	0
	Refineries ...	...	...	5	250	0	0	...	.....			5	250	0	0	4	200	0	0	...	.....			4	200	0	0	...	.....	1	50	0	0
				...	.....			...	.....			.	602	0	0	...	.....			...	.....			...	6,754	0	0	...	6,262	0	0	...	110	0	0
ALLAHABAD ...	Crude Saltpetre	...	...	380	760	0	0	5	2	8	0	385	762	8	0	463	926	0	0	1	0	8	0	464	926	8	0	79	164	0	0	...	.....	
	Sujjee	...	...	4	8	0	0	...	... ..			4	8	0	0	...	.....			...	.....			...	.....			...	.....	4	8	0	0
	Kharee	...	...	49	1,225	0	0	...	... ..			49	1,225	0	0	50	1,250	0	0	...	.....			50	1,250	0	0	1	25	0	0	...	.....	
				433	1,993	0	0	5	2	8	0	438	1,995	8	0	513	2,176	0	0	1	0	8	0	514	2,176	8	0	80	189	0	0	4	8	0	0
	Refineries ...	...	...	9	450	0	0	...	.....			9	450	0	0	8	400	0	0	...	.....			8	400	0	0	...	.....	1	50	0	0
				...	.....			...	... ..			...	2,445	8	0	...	.....			...	.....			...	2,576	8	0	...	189	0	0	...	58	0	0
JOUNPORE ...	Crude Saltpetre	...	...	176	352	0	0	2	1	0	0	178	353	0	0	207	414	0	0	2	1	0	0	209	415	0	0	31	62	0	0	...	.....	
	Sujjee	...	...	327	654	0	0	...	.....			327	654	0	0	212	424	0	0	...	.....			212	424	0	0	...	.....	115	230	0	0
	Russee	...	...	...	.....			...	.....			...	... ..			...	.....			...	.....			...	.....			...	.....	...	.....		
	Kharee	...	...	62	1,550	0	0	1	6	1	0	63	1,556	4	0	4	100	0	0	...	.....			4	100	0	0	...	... ..	59	1,456	0	0
				565	2,556	0	0	3	7	4	0	568	2,563	4	0	423	938	0	0	2	1	0	0	425	939	6	0	31	62	0	0	174	1,686	4	0
	Refineries ...	...	..	3	150	0	0	...	.....			3	150	0	0	4	200	0	0	...	.....			4	200	0	0	1	50	0	0	...	.....	
				...	.....			...	... ..			..	2,713	4	0	...	.....			...	.....			...	1,139	0	0	...	112	0	0	...	1,6 6	4	0
GHAZEEPORE ...	Crude Saltpetre	...	...	846	1,692	0	0	1	0	8	0	847	1,692	8	0	1,276	2,552	0	0	2	1	0	0	1,278	2,553	0	0	431	860	8	0	...	.....	
	Sujjee	...	...	592	1,184	0	0	4	2	0	0	5 6	1,186	0	0	292	584	0	0	...	.....			292	584	0	0	...	.....	304	602	0	0
	Kharee	...	...	24	600	0	0	...	.....			24	600	0	0	12	300	0	0	...	.....			12	300	0	0	...	.....	12	300	0	0
				1,462	3,476	0	0	5	2	8	0	1,467	3,478	8	0	1,580	3,436	0	0	2	1	0	0	1,582	3,437	0	0	431	860	8	0	316	902	0	0
	Refineries ...	...	.	17	850	0	0	...	.....			17	850	0	0	24	1,200	0	0	...	.....			24	1,200	0	0	7	350	0	0	...	.....	
				...	.....			...	.....			..	4,328	8	0	...	.....			...	.....			...	4,637	0	0	...	1,210	8	0	...	902	0	0
GORUCKPORE ...	Crude Saltpetre	...	...	520	1,040	0	0	3	1	8	0	523	1,041	8	0	888	1,776	0	0	7	3	8	0	895	1,779	8	0	372	738	0	0	...	.....	
	Refineries ...	...	..	3	150	0	0	...	... ..			3	150	0	0	7	350	0	0	...	.....			7	350	0	0	4	200	0	0	...	.....	
				...	.....			...	... ..			...	1,191	8	0	...	.....			...	.....			...	2,129	8	0	...	938	0	0	...	.....	
TOTAL ...	Crude Saltpetre	...	...	4,738	9,476	0	0	36	18	0	0	4,774	9,494	0	0	5,796	11,592	0	0	30	15	0	0	5,826	11,607	0	0	1,052	2,113	0	0	...	.....	
	Sujjee	...	...	931	1,862	0	0	4	2	0	0	935	1,864	0	0	504	1,008	0	0	...	.....			504	1,008	0	0	...	.....	431	856	0	0
	Russee	...	...	327	654	0	0	...	.....			327	654	0	0	205	410	0	0	1	0	8	0	206	410	8	0	...	.....	121	243	8	0
	Kharee	...	...	1,040	26,000	0	0	4	25	0	0	1,044	26,025	0	0	743	18,575	0	0	2	12	8	0	745	18,587	8	0	...	.....	299	7,437	8	0
		TOTAL	...	7,036	37 992	0	0	44	45	0	0	7,080	33,017	0	0	7,248	31,585	0	0	33	28	0	0	7,281	31,613	0	0	1,052	2,113	0	0	851	8,537	0	0
	Refineries ...	...	...	145	7,250	0	0	...	.....			145	7,250	0	0	157	7,850	0	0	1	12	8	0	158	7,862	8	0	13	612	8	0	...	.....	
		GRAND TOTAL	...	...	.....			...	... ..			...	45,287	0	0	...	.....			...	.....			...	39,475	8	0	...	2,725	8	0	...	8,537	0	0
ADD PAST YEAR'S FEES IN CAWNPORE CIRCLE			...	...	... ..			...	.....			...	100	0	0	...	.....			...	.....			...	.....			...	.....	...	100	0	0
													45,387	0	0										39,475	8	0						8,637	0	0
DEDUCT INCREASE		...	...	...	.....			...	.....			...	.....			...	.....			...	.....			...	.....			...	.....	...	2,725	8	0
NET DECREASE		...	...	...	.....			...	.....			...	.....			...	.....			...	.....			...	.....			...	.....	...	5,911	8	0

F. W. VERE.
Deputy Commissioner, Inland Customs.

Annexure E.

Licenses of both letters refused.

NAME OF CIRCLE.	A.	B.
Agra	2	.....
Allygurh	99	.....
Boolundshuhur	6	... .
Budaon	5	.....
Mynpoorie	25	.. ...
Furruckabad	16	.....
Cawnpore	34	.. ...
Futtehpore	17	.....
Allahabad	52	.....
Jounpore	13	.....
Ghazeepore	53	.....
Goruckpore	13	.....
TOTAL ...	355	.....

Annexure F.

Seized for working without Licenses.

	Cases.		Men.		Committed for Trial.			
					Cases.		Men.	
	1868-69.	1869-70.	1868-69.	1869-70.	1868-69.	1869-70.	1868-69.	1869-70.
Agra	3	3	7	10	2	1	5	4
Allygurh	3	4	7	11	...	3	...	5
Boolundshuhur	...	...	...	...	...	...	...	...
Budaon	2	6	5	8	2	...	4	...
Mynpoorie	20	7	37	8	16	2	33	3
Furruckabad	8	4	11	6	5	4	8	5
Cawnpore	4	...	8	...	3	...	6	...
Futtehpore	1	1	3	1	1	1	3	1
Allahabad	14	26	42	36	14	25	42	35
Jounpore	6	21	12	21	3	11	5	11
Ghazeepore	16	19	45	24	8	14	23	17
Goruckpore	...	2	...	3	...	1	...	1
TOTAL ...	77	93	177	128	54	62	129	82

F. W. VERE,
Deputy Commissioner, Inland Customs.

Appendix F.

Review of the administration of the Oudh Section of the Internal Branch of the Department of Inland Customs for the official year 1869-70.

INTERNAL DEPARTMENT, OUDH.

1. Considerable changes have been effected in the internal economy of the section. Five circles have been condensed into four, composed as follows, *viz.* :— Internal economy,

GONDAH CIRCLE, comprising the districts of Gondah, Baraitch, Fyzabad and Barabunkee.

PERTABGURH CIRCLE, comprising the districts of Pertabgurh and Sooltanpoor. Changes,

OONAO CIRCLE, comprising the districts of Oonao and Roy Bareilly.

LUCKNOW CIRCLE, comprising the districts of Lucknow, Hurdui, Seetapoor and Kheree.

2. This has made it possible to dispense with one Deputy Inspector and with his office staff, thereby reducing the executive* from 296 to 290 officers and men. *Reduction thence resulting.*

FINANCIAL RESULTS.

GROSS REALIZATIONS,

3. Receipts of 1869-70 amount, from all sources, to Rs. 12,062-8-1 against Rs. 11,231-9-10 in 1868-69, giving, in favor of the year under review, an increase of Rs 830-14-3, or 7·39 per cent., details being appended in the following table, comparing receipts of 1869-70 with those of three preceding years :— Increases as compared with 1868-69.

YEAR.	Fees on Licenses.	Fines and confiscations.	Duty on Salt.	TOTAL.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
1869-70	3,171 8 0	45 8 0	8,845 8 1	12,062 8 1
1868-69	2,440 0 0	15 0 0	8,776 9 10	11,231 9 10
1867-68	3,821 8 0	67 14 11	8,092 14 2	11,982 5 1
Corresponding 12 months of 1866-67...	3,939 0 0	6 0 0	10,708 5 10	14,653 5 10

4. Annexure A gives the collections for each month of 1869-70 in comparison with 1868-69. Five months exhibit decreases which are palpable fluctuations; those in August, September and October hinging on variations of season, which in different years admit of more or less movement of our officers, and encourage or repress, as the case may be, applications for licenses. Annexure B shows how the income was distributed among the circles which make up the departmental jurisdiction; *a propos* of which, it may be stated that the re-constructions alluded to in the opening para. of this Report, will, until that for the now current year comes to be written, render the increase and decrease entries, in the annexure in question, a mere matter of form. In the next Report they will regain their departmental value. Collections analyzed, *month by month,* *and by circles.*

* Exclusive of Excise Agents (Mooshriffs).

Salt destroyed.

5. No salt, produced under Act XXXI of 1861, has been destroyed, as too impure for sale, during 1869-70.

Causes of increase in realizations,

the principal of which has been relaxation of a departmental rule

followed, apparently, by no ill effect.

6. Such increase as there has been in the income of 1869-70 has been mainly in the item of fees for licenses; for while the increase in duty on salt is but 0·77 per cent., that on fees* is 29·95 per cent. Fines and confiscations, a heading subject to uncontrollable fluctuations, need not be discussed. A relaxation of our first stringency in enforcing that provision of Notification 152A of 9th October 1867, which arms the Department with power to refuse licenses where seizures have been effected, has been the principal cause of the enlarged issue of licenses, of which even more might have been taken but for the diversion of labor towards the legalized salt factories, and to Railway and other Public Works. The relaxation above alluded to was, as indicated in para. 9 of last year's Report, the result of a suspicion that we had perhaps been more severe than was actually necessary, in our first application of the new rules. No harm, so far as we can yet see, has resulted: for although there has been an increase in one kind of illicit manufacture of salt, it has mostly been in a way disconnected with licensed works and has occurred principally in a circle (Pertabgurh) where these latter are comparatively few in number.

CHARGES

compared with those of 1868-69.

Increase.

7. The charges of the year, details of which, together with comparative items for three preceding years, are given in the subjoined table, amount to Rs. 66,288-15-5, being Rs. 9,893-1-4, or 17·54 per cent. in advance of those of 1868-69; fixed charges being in excess by Rs. 5,869-13-7, or 11·35 per cent., and contingencies by Rs. 4,023-3-9, or 85·48 per cent.

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* *Vide* also para. 12, under issue of licenses.

INTERNAL BRANCH OF THE DEPT. OF INLAND CUSTOMS, 1869-70.

YEAR.	FIXED				CONTINGENCIES.									
	SUPERVISION.	PREVENTION.		Total Fixed.	Travelling allowance other than that fixed for Deputy Inspectors.	Conveyance of weighing apparatus and tents.	Pay of Peons sick in Hospital.	Postage Labels.	Dieting of Prisoners.	Half Fines as per sentence of Courts.	Miscellaneous.	Total of Contingencies.	Grand Total of charges.
	Assistant Commissioner and Office.	Officers, Deputy Inspectors and Sub-Deputy Inspectors.	Men.										
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
1869-70	10,768 9 5	23,630 0 9	23,160 5 10	57,559 0 0	2,197 10 4	606 15 3	14 5 7	584 8 0	21 10 0	952 5 3	4,352 9 0	8,729 15 5	66,288 15 5
1868-69	9,371 0 0	22,839 1 7	19,480 0 10	51,689 2 5	2,218 4 9	477 11 6	.....	698 4 0	8 5 6	346 1 11	958 0 0	4,706 11 8	56,395 14 1
1867-68	9,405 7 10	21,895 13 3	19,763 6 8	51,064 11 9	1,032 3 4	245 0 0	.....	814 0 0	2 3 0	362 1 2	650 7 7	3,105 15 1	54,170 10 10
Corresponding 12 months of 1866-67 ...	9,980 3 5	20,731 11 3	19,729 13 0	50,441 11 8	1,143 2 4	336 5 11	.....	433 8 0	0 9 4	227 9 0	667 12 9	2,778 15 4	53,220 11 0

Fixed charges, *compared with* 1868-69. *Causes of increase.*

8. The increase under fixed charges is to be accounted for by remembering that the higher scale of salaries, sanctioned by the Government of India in 1868, came into effect only in the latter half of that year, whereas the entire year has, in the present instance, felt the reaction.

Contingencies, compared with 1868-69, *increases explained.*

9. Under contingencies, it will suffice to explain increases, which occur under, "Conveyance of Weighing Apparatus and Tents," to an amount of Rs. 129-3-9 caused by increases of movement among Deputy Inspectors; and under "Pay of Peons sick in Hospital," to Rs. 14-5-7 the item being, in 1868-69, nil; and under "Dieting of Prisoners," an item naturally subject to fluctuations, to a sum of Rs. 13-4-6; and under "Half Fines," which represent the perquisites of captors of persons convicted in Court, to a figure of Rs. 606-3-4 caused by our now drawing, in our own contingent bills, sums which formerly we received from the Court which imposed the fine; also under "Miscellaneous," to an amount of Rs. 3,394-9-0, ascribable to an outlay of Rs. 3,550 for purchase of tents, of which it may be remarked that it would be but fair to attribute but one-fourth to the presently discussed year, inasmuch as the tents will last, at the very least, for four years, and probably much longer.

Absence of comparison of charges with years prior to 1868-69, *explained.*

10. There is manifestly no purpose to be gained by prolonging the comparison of charges, by comparing those of 1869-70 with those of years when, as regards fixed charges, a lower scale of salaries prevailed, but it being necessary to ascertain the proportion which income and outlay bear to each other, the following table, embodying details for four years, has been prepared :—

Incidence of charges on income.

Year.	Gross expenditure.	Realizations.	Net expenditure.	Net expenditure per mensem.	Percentage of gross expenditure on income.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
1869-70	66,288 15 5	12,062 8 1	54,226 7 4	4,518 3 11	549·56
1868-69	56,395 14 1	11,231 9 10	45,164 4 3	3,763 11 3	502·13
1867-68	54,170 10 10	11,982 5 1	42,188 5 9	3,515 11 1	452·09
Corresponding 12 months of 1866-67 ...	53,220 11 0	14,653 5 10	38,567 5 2	3,213 15 1	363·20

Progressive increase of charges, *Explanation.*

11. In this, the figures show that the incidence of charges has progressively increased. The reasons are precisely the same for Oudh and for the North-Western Provinces, *viz.*, that, in the three earlier years of the series, there was a progressive decline of income, from causes which the Department possessed no power to control, while, under pressure of the obligation to maintain preventive efficiency unimpaired, charges not only

remained much as they were, but were subject to increase as officers employed on the branch, earned promotion by length of service. In 1868-69 a still sinking income came in juxtaposition with a general increase to salaries, causing, naturally, a considerable increase in the incidence of the latter; while in 1869-70, the development of this increase is slightly tempered by an addition to income. The increase in incidence in 1869-70 is 47·43 per cent., but in 1868-69 it was 50·04, and in 1867-68 was 88·89 per cent. As the trade in saltpetre has to a considerable extent revived, it would be reasonable to look forward to such an increase of income from duty on salt produced in refineries, as would bring about a reaction, and lower the incidence of cost of our preventive arrangements; but against this probability has to be placed the effect, upon the salt market, of the local works, and of the extension of Railways, both tending to lower the price of salt, and with it, the profits to be derived by refiners of saltpetre from sale of their residuary produce. Already small refiners (and in Oudh *all* refineries, since the collapse of Sah Mukhun Lal, are small) are known to lean towards quantity rather than quality; and the lower their profits on salt, the more this tendency is likely to grow upon them. In connection with this, it will be unnecessary to do more than briefly indicate the dependence of the local salt works on the preventive establishment, without which it is quite certain that the produce of the former, weighted with its three rupees two annas per maund, would, for consumption of the less wealthy classes, have but slight chance against salt as good, turned out as far as its makers were in question for next to nothing.

Prospect of reduction of cost.

Causes which may prevent this.

Utility of departmental force,

in connection with new salt works.

12. Annexure C shows the issue of licenses of every kind and the fees thence realized, with details of increase or decrease for every Customs Circle. During the year, the province through, works for preparation of crude saltpetre have increased by 222, and refineries by eight, which I regard as the simple consequence of the undeniable improvement in the Calcutta market, evidence of which will be found farther on. Works for sujjee (a rough carbonate of soda) have fallen off by 46, probably* from the same cause (lessening of demand) as in the North-Western Provinces, and those for sulphate of soda (Kharee) are fewer by eight, a matter for no regret, when their highly dangerous nature is borne in mind.

ISSUE OF LICENSES

For saltpetre works, increase.

Causes.

Other works, decrease.

13. Annexure D shows the number of licenses refused during the year; the figures reproducing very nearly those of 1868-69 when 200 crude and one refining licenses were refused. In the year under review, we have 192 of the former and one of the latter.

Refusals to license.

14. Annexure E shows the numbers of persons seized for working saline factories without license and its figures show that this species of illegality is distinctly wearing out.

Cases of working without license.

15. At the first glance, the statistics of the year would seem to point to an alarming increase of illicit manufacture, but a closer examination is more re-assuring. *Cases* have increased; but this is mainly because we have adopted a more accurate

ILLICIT MANUFACTURE OF SALT.

At first sight increasing.

* The Assistant Commissioner is silent on the subject.

Real condition.

Persons captured.

Proofs of decrease in illicit production.

method of account; and if a larger number of persons have brought themselves under interference in 1869-70 than in 1868-69, *viz.*, 2,089 against 1,270, the cause has been discovery of rather extensive, even if petty, illicit manufacture in the highly saliferous tracts of Pertabgurh; but, on the other hand, despite the increase in persons captured, the quantity of salt seized has fallen, from maunds 168-28-1 in 1868-69 to maunds 83-24-15 in 1869-70; and, most re-assuring feature of all, we have it on Mr. Hay's authority that, during no corresponding period has there been less general scraping up of saliferous soil. On the whole then, there is ground for believing that taking the province as a whole, there has, during 1869-70, been less illicit manufacture than usual. Migration of hereditary salt makers, their partial attraction to legalized works, and the vigorous support of judicial authorities, are the reasons assigned by the Assistant Commissioner for this favorable condition of things.

PENAL ACTION OF THE DEPARTMENT.

16. The penal action of the Department is exhibited in the following Tables, the first of which has already virtually received notice in the preceding paragraph :—

Name of Circle.	Cases of seizure.				Quantity of salt.				Mlk seized.			
	1866-67.	1867-68.	1868-69.	1869-70.	1866-67.	1867-68.	1868-69.	1869-70.	1866-67.	1867-68.	1868-69.	1869-70.
	No.	No.	No.	No.	Md. S. C.	Md. S. C.	Md. S. C.	Md. S. C.	No.	No.	No.	No.
Lucknow ...	259	183	220	91	33 24 14	42 37 0	57 36 0	34 18 5	476	240	324	98
...												
...												
Oonao ...	216	98	113	156	32 21 6	5 8 12	14 33 1	6 22 0	994	310	309	167
Pertabgurh ...	248	127	313	1,791	36 36 5	22 5 13	63 2 1	41 31 12	856	435	557	1,317
Gondah ...	60	44	48	13	1 37 3	1 28 2	2 36 15	0 32 14	71	50	50	17
...												
Total ...	783	452	694	2,051	104 39 12	71 39 11	168 28 1	83 24 15	2,397	1,035	1,270	2,089

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PERSONS.

17. The next table showing what became of all those with whom the Department was compelled to interfere, possesses features of interest. Out of the total number 2,089, 1,696, or 81·18 per cent. were released by the Department after suffering no penalty, but the nominal one of destruction of works (usually consisting of a pot or two, and never by any chance of an expensive plant*) and of such salt as may have been made. Of these 1,696 persons 1,608 *had made salt*, but less than one seer; three were set at large as infirm, and only 85 or 5·01 per cent. of the whole number released for want of proof, or in other words, by reason of imperfect justification of our first interference with them. These statistics show the working of the system introduced under Government Order 152 A of the 9th October 1867, under the earlier system, most, if not all of the 1,608 persons abovenamed as having made salt, would have been prosecuted, and as the history of our prosecutions proves, by far the larger portion would have been convicted and punished.

Number captured.

Departmentally released,

for pettiness of production,

for infirmities,

for want of proof.

18. Of the 393 persons whom we have prosecuted we know the fortune of all but 19, and it is highly satisfactory to find that of the cases decided when the year closed, no less than 91·17 per cent. were convicted. This percentage is more likely to increase than to decline when the accounts for the year are completed, and it is already more than six per cent. better than the entire result of 1868-69, when but 83·27 per cent. of our cases were successfully prosecuted. The improvement is much to the credit of our local officers as a body, and testifies to great care and judgment in their preparation of cases.

Number committed to Criminal Courts.

Percentage of convictions.

Improvement as compared with 1868-69.

Year.	Total number of persons captured by the Department.	Released by Department.				Sent for trial.	Acquitted.	Convicted.	Pending when report was submitted.	Percentage of convictions on number of persons sent for trial deducting those whose cases were still undecided.
		For making less than one seer.	Infirm persons, pregnant women or minors.	On proof of ignorance or inadvertance.	For want of proof.					
1869-70 ...	2,089	1,608	3	...	85	393	33	341	19	91·17
1868-69 ...	1,270	457	7	...	191	615	102	508	5†	83·27
1867-68 ...	1,035	260	...	...	185	590	76	514	...	87·11
1866-67 ...	2,387	...	9	...	338	2,040	392	1,641	7‡	80·71

* It is not amiss to be precise on these matters, for the phrase "destruction of works" might, with some persons, conjure up visions of woeful injury to valuable property and of ruinous loss, disguised as a lenient procedure.

† Five men absconded.

‡ Seven men "

Punishments awarded by Courts.

19. The following table shows the punishments awarded by Criminal Courts, the number of persons who underwent imprisonment, and of those who, rather than go to jail, paid fines:—

Year.	Imprisoned in default of payment of fine.												Paid fines.																	
	No. imprisoned for 6 months.	No. above 3 months.	Above 2 months.	Above 1 month.	Above 15 days.	Above 10 days.	Below 10 days.	Total who underwent imprisonment.	Above Rs. 100 and below Rs. 250.	Aggregate paid.	Above Rs. 50 and below Rs. 100.	Aggregate paid.	Above Rs. 30 and below Rs. 50.	Aggregate paid.	Above Rs. 20 and below Rs. 30.	Aggregate paid.	Above Rs. 10 and below Rs. 20.	Aggregate paid.	Above Rs. 5 and below Rs. 10.	Aggregate paid.	Below Rs. 5	Aggregate paid.	Total who paid fines.	Aggregate paid.						
										Rs. A. P.		Rs. A. P.		Rs. A. P.		Rs. A. P.		Rs. A. P.		Rs. A. P.		Rs. A. P.							
1869-70	...	2	14	17	42	75	31	8	210	2	250	0	0	0	0	0	0	7	32	411	0	0	58	317	0	0	52	160	13	4	151	1,318	13	4
1868-69	...	7	38	30	51	27	4	5	162	3	530	0	0	7	360	0	0	10	535	0	0	37	820	12	9	99	1,148	5	8	110	655	0	0	80	226	0	6	346	4,055	2	11
1867-68	...	3	23	49	46	20	5	13	159	1	150	0	0	5	250	0	0	8	275	9	0	29	645	11	2	102	1,256	10	5	126	733	3	6	54	221	7	7	355	3,532	9	2
1866-67	...	12	42	64	94	69	6	23	330	7	1,100	0	0	20	1,140	0	0	19	686	6	0	81	1,757	8	0	251	2,910	5	5	271	1,389	10	4	662	1,522	14	9	1,311	10 656	12	6

Number who underwent imprisonment, and who paid fines.

20. Out of 341 persons, 210, or 61·58 per cent., underwent imprisonment, and the remaining 131, or 38·42 per cent., paid fines, of which the incidence, per head, was Rs. 10-7-1.

Tendency to prefer imprisonment to fine,

increasing in Oudh.

21. In one respect, this table exhibits a condition opposed to that prevalent in the North-Western Provinces, where, among departmental criminals, the tendency is to pay, rather than go to jail. Gradually, in Oudh, the proportion of those who accept imprisonment is increasing, and this inclination has been especi-

ally marked during 1869-70, as the following comparative figures will show:—

In 1869-70 the number of those who went to jail rather than pay fines was	61·55 per cent.
In 1868-69	31·88 „
In 1867-68	30·93 „
In 1866-67	20·10 „

Inference that wealthier workers in saline substances are abandoning illicit practices

From these data the Assistant Commissioner infers that the wealthier of the professed salt makers are abandoning illicit practices: indeed he goes so far as to say "have now altogether given up the practice." But it is scarcely safe to generalize as yet, for during the year now under consideration, a principal feature has been the number of cases of domestic manufacture discovered in the Pertabgurh Circle, which were certain to involve a considerable proportion of a poorer class of workers, and to add to the number of those who would be likely to prefer imprisonment (which carries with it provision, and that ample and excellent, of food) to payment of a considerable sum: while the fact that even now, more than a third of those convicted have preferred to escape imprisonment by paying sums, the average of which was considerably above the average incidence of the preceding four years, proves that we still have to deal with no inconsiderable proportion of a comparatively wealthy class. Ability to put down ten rupees in hard coin removes, in India, the man who displays it from the list of those who must be classed as indigent.

not yet safe to rely on.

A large percentage still prefers payment of sums, relatively large, to imprisonment.

Absence of important cases.

22. No cases, sufficiently remarkable to merit notice here, have occurred during the year.

MISCELLANEOUS.

Condition of saltpetre trade.

23. Such information as is possessed on the condition of the saltpetre trade will be found in para. 29 of the accompanying report on the North-Western Section of the Internal Branch. It may however here be noted that prices in Calcutta have risen from Rs. 5-11 to Rs. 6-14 per maund, and that exports in 1869-70 were maunds 6,35,116 against 4,65,566 in 1868-69.

Out-turn of salt from saltpetre refineries.

24. Increase in out-turn of salt from saltpetre refineries is but nominal, being maunds 2,948-17-2 in 1869-70 against maunds 2,925-19-5 in 1868-69. The increase in the number of refineries would warrant our expecting better results, and inquiries are in progress with intent to throw, if possible, some light on the cause of what is rather a disappointment. This *may* be found in the proclivity, alluded to in para. 11, to sell all produce of these small concerns, as saltpetre; but it is the duty of a preventive establishment to take little for granted, and we are accordingly looking into the matter. No compositions, under Section VII of the Act, have been permitted in Oudh.

Refineries under contract.

Prices of Saltpetre salt.

25. Saltpetre salt, *i. e.*, that which is made in refineries, sells at from Rs. 4-8 to Rs. 5 per maund.

IMPORTATION OF SALT.

Decline.

26. A considerable decline in importations of taxed salt is apparent, and by the great inlet across the Cawnpore bridge, but maunds 4,97,393 have gone into Oudh against maunds 6,89,425 in 1868-69,* while imports *viâ* Shahjahanpore are vari-

* Since the above was written, a certain briskness has again become apparent by this inlet.

ously stated at from 1,25,000 to 1,59,742 maunds, showing, in either case, a distinct falling off, as compared with earlier years. Scarcity of carriage and unwillingness of capitalists to risk investments until something certain was known of the effect of the newly established local salt works, are the causes advanced to account for the change, in which there is nothing, after all, to cause much uneasiness. Opening of salt works in Oudh was sure to check importations, and the better such works succeed, the more marked will be their influence in this direction. Meanwhile, we shall derive our revenue from two sources in lieu of one, and if the local works fail, importations will be prompt to supply any void caused by an unanswered demand.

Apparent causes.

ESTABLISHMENT.

Casualties.

27. Casualties, among the preventive force, are shown in the following table:—

	Number of each rank and grade.							Total Subordinate Establishment.	Percentage of total of each kind of casualty on total Establishment.
	Sub-Deputy Inspectors.	Mohurrirs.	Mooshriffs.	Kotegushts.	Jemadars.	Peons.	Orderlies.		
Total sanction ...	14	9	35	19	20	208	16	321	.....
During the year died ...	...	...	...	...	...	1	...	1	0·31
Dismissed for misconduct ...	...	1	2	4	2	17	...	26	8·09
Failed to rejoin	1	...	...	...	...	9	1	11	3·42
Removed as unfit for service	...	...	1	2	...	51	...	54	16·82
Resigned	1	1	1	2	...	14	2	21	6·54
Total casualties ...	2	2	4	3	2	92	3	113	35·20
Percentage of casualties on whole Force									35·20

Health of Force.
Good.

28. The health of the men, all exposure notwithstanding, has been good; the death rate is nominal, for the one man, who died during the year, met his death by an accident, in nowise connected with his duties.

Dismissals.

their percentage.

29. Dismissals are, at first sight, much below those of 1868-69, when they amounted to 22·39 per cent. But in that year, we lumped all dismissals under one heading, whereas we now distinguish between dismissals for misconduct, failures to rejoin, and removals for unfitness; and the sum of these makes up 28·13 per cent., out of which 16·182 per cent. are for unfitness.

Undesirable features.

This is far from satisfactory; we have made no general reduction, which would naturally be the signal for ridding ourselves of our less eligible hands; and officers could not have been as careful in selection as they are bound to be, for anything like this proportion of removals to be necessary. The attention of the Assistant Commissioner has been directed to the matter, in which he will doubtless effect amendment. The causes which led to dismissal, in cases classed as misconduct, are displayed in the following table. The more heinous offences, collusion, falsification of records and reception of bribes, have led, respectively, to 11·53 per cent., 30·76 per cent. and 11·53 per cent., of the whole dismissals. It will be observed that all misconduct was departmental. As against the public, the force has been void of all offence.

Causes of dismissals.

All misconduct departmental.

Absence of offence against the public.

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Causes.	Sub-Deputy Inspectors.	Moburrirs.	Mooshriffs.	Kotegushts.	Jemadars.	Lance Jemadars and Peons.	Orderlies.	Total.
Collusion	...	...	1	...	...	2	...	3
Falsifying records and false reports	...	...	...	2	1	5	...	8
Reception of bribes ...	...	1	...	...	1	1	...	3
Disobedience and disrespect to officers.	...	...	...	1	...	...	...	1
False returns of residence ...	...	...	...	...	...	3	...	3
Asking gratuities	...	...	...	...	...	...	...	...
Illegal seizures	...	...	...	...	...	...	...	...
Allowing escape of prisoners ...	...	...	...	...	...	2	...	2
Miscellaneous	...	...	1	...	...	5	...	6
Grand Total ...	...	1	2	3	2	18	...	26

30. One public servant alone was committed for trial by a Criminal Court. The offence was one against Postal Regulations, and the offender was convicted by the Court. Prosecutions of force before Criminal Courts.

WORK OF OFFICERS.

31. Four officers of the rank of Deputy Inspector have done duty in Oudh during the year, and have on the average traversed 1,470 miles. This is below the average of last year, but one of the number, Mr. Lyon, was long employed in assisting his superior, Mr. Hay, in preliminary operations at the local salt works, and the unusual severity of heat in the first months of the official year made something less than ordinary out-door activity, a matter of absolute necessity. In all other respects, and very notably in the important item of attention to details of cases which were sent into Court, there is every reason to be content with the work of the year. Messrs. Dawes and Kenyon have done fairly well in out-door work, and Mr. Lyon, who is described as having been useful at the new works, has done a moderate amount of ordinary duty in addition. Generally satisfactory. Notice of Officers.

32. The Assistant Commissioner, Mr. Hay, has had to devote so much of his time to the important and difficult task of organizing a local manufacture of salt, and has thus worked so much under the immediate orders of the Commissioner, that notice of his exertions will come much more appropriately from that gentleman than from me. I will simply bear witness that Mr. Hay has not meanwhile in any way seemed to neglect the more important of his routine and older duties. Work of Assistant Commissioner.

F. W. VERE,
Depy. Commr. of Inland Customs.

ANNEXURE A.

MONTHS.	Collections for 1868-69.			Total 1868-69.	Total 1869-70.	Collections for 1869-70.			Increase.	Decrease.
	Fees.	Fines on factories and sales.	Duty on salt.			Fees.	Fines on factories and sales.	Duty on Salt.		
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
April	120 0 0	.....	1,217 14 10	1,337 14 10	1,266 8 6	144 8 0	.....	1,122 0 6	.....	71 6 4
May	8 0 0	.....	1,282 14 11	1,290 14 11	1,618 8 9	51 0 0	10 0 0	1,557 8 9	327 9 10	.....
June	.....	.....	753 1 3	753 1 3	830 15 11	.....	7 0 0	823 15 11	77 14 8	.....
July	506 0 0	.....	480 6 4	986 6 4	1,161 5 3	462 0 0	.....	699 5 3	174 14 11	.....
August	156 0 0	.....	112 1 9	268 1 9	254 12 3	108 0 0	5 0 0	141 12 3	.....	13 5 6
September	6 0 0	.....	558 0 3	564 0 3	274 15 9	166 0 0	1 0 0	107 15 9	.....	289 0 6
October	146 0 0	.....	260 8 1	406 8 1	266 12 5	172 0 0	.....	94 12 5	.....	139 11 8
November	340 0 0	.....	611 8 9	951 8 9	1,452 15 6	430 0 0	.....	1,022 15 6	501 6 9	.....
December	212 0 0	.....	513 0 4	725 0 4	915 11 3	586 0 0	.....	329 11 3	190 10 11	.....
January	334 0 0	.....	878 7 5	1,212 7 5	1,384 15 7	708 0 0	1 8 0	675 7 7	172 8 2	.....
February	472 0 0	15 0 0	527 15 8	1,014 15 8	1,070 5 3	222 0 0	.....	848 5 3	55 5 7	.....
March	149 0 0	.....	1,580 10 3	1,720 10 3	1,564 9 8	122 0 0	21 0 0	1,421 9 8	.....	156 0 7
TOTAL ...	2,440 0 0	15 0 0	8,776 9 10	11,231 9 10	12,062 8 1	3,171 8 0	45 8 0	8,845 8 1	1,500 6 10	669 8 7
DEDUCT DECREASE ...	.....	.....	.....	.....	.....	.....	.....	.....	669 8 7	.....
NET INCREASE ...	.....	.....	.....	.....	.....	.....	.....	.....	830 14 3	.....

F. W. VERE,
Depy. Commr. of Inland Customs.

ANNEXURE B.

Annual Comparative Statement of Departmental Collections for 1869-70.

Names of Circles.	Amount of Collections in 1868-69.	Amount of Collections in 1869-70.	Increase.	Decrease.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Lucknow	5,236 11 5	5,100 12 1	.....	135 15 4
Oonao	2,439 5 11	3,038 15 4	599 9 5	.....
Pertabgurh	678 2 5	574 0 11	.....	104 1 6
Gondah	2,877 6 1	3,348 11 9	471 5 8	.....
Total	11,231 9 10	12,062 8 1	1,070 15 0	240 0 10
Deduct Decrease	.....	.....	240 0 10	
Net Increase	.....	.....	830 14 3	

F. W. VERE,
Deputy Commr. of Inland Customs.

ANNEXURE C.

NAMES OF CIRCLES.	DESCRIPTION OF WORKS.	1868-69.				1869-70.				Total.				Increase.				Decrease.			
		Number of Licenses.	Fees.	Number of Duplicate Licenses.	Fees.	Number of Licenses.	Fees.	Number of Duplicate Licenses.	Fees.	Licenses.	Fees.	Number of Duplicate Licenses.	Fees.	Licenses.	Fees.	Number of Duplicate Licenses.	Fees.	Licenses.	Fees.	Number of Duplicate Licenses.	Fees.
			Rs. A. P.		Rs. A. P.		Rs. A. P.		Rs. A. P.		Rs. A. P.		Rs. A. P.		Rs. A. P.		Rs. A. P.		Rs. A. P.		Rs. A. P.
LUCKNOW ...	Crude Saltpetre ...	120	240 0 0	...	.....	120	240 0 0	...	.....	219	436 8 0	1	0 8 0	99	196 8 0	...	.....	...	....	...	....
	Sujjee ...	64	128 0 0	...	.....	64	128 0 0	...	.....	18	38 0 0	...	.....	...	.....	46	92 0 0	...	.....	...	.....
	Kharee ...	91	182 0 0	...	.....	91	192 0 0	...	.....	81	162 0 0	...	.....	...	.....	10	20 0 0	...	.....	...	.....
	Refineries ...	275	550 0 0	...	.....	275	550 0 0	...	.....	317	634 9 0	1	0 8 0	99	196 8 0	56	112 0 0	...	.....	...	.....
		15	750 0 0	...	.....	15	750 0 0	...	.....	18	900 0 0	...	.....	3	150 0 0	...	....	...	.....	...	.....
		...	.....	...	.....	...	1,300 0 0	...	.....	...	1,534 9 0	...	.....	...	346 8 0	...	112 0 0	...	.....	...	.....
OONAO ...	Crude Saltpetre ...	14	28 0 0	...	.....	14	28 0 0	24	48 0 0	24	48 0 0	...	.....	10	20 0 0	...	.....	...	.....	...	.....
	Kharee ...	13	26 0 0	...	.....	13	26 0 0	17	34 0 0	17	34 0 0	...	.....	4	8 0 0	...	.....	...	.....	...	.....
	Refineries ...	27	54 0 0	...	.....	27	54 0 0	41	82 0 0	41	82 0 0	...	.....	14	28 0 0	...	.....	...	.....	...	.....
		4	200 0 0	...	.....	4	200 0 0	10	500 0 0	10	500 0 0	...	.....	6	300 0 0	...	.....	...	.....	...	.....
		...	.....	...	.....	...	254 0 0	...	.....	...	582 0 0	...	.....	...	328 0 0	...	.....	...	.....	...	.....

PERTABGHUR	Crude Saltpetre	63	126 0 0	...	.....	63	126 0 0	8	16 0 0	1	0 8 0	9	16 8 0	...	.....	54	109 8 0
	Kharee	16	32 0 0	...	.....	16	32 0 0	5	10 0 0	...	.....	5	10 0 0	...	.....	11	22 0 0
		79	158 0 0	...	.....	79	158 0 0	13	26 0 0	1	0 8 0	14	26 8 0	...	.....	65	131 8 0
	Refineries	1	50 0 0	...	.....	1	50 0 0	1	50 0 0	...	.....	1	50 0 0	...	.....	...	.....
		...	.....	..	.. ..	...	208 0 0	...	.....	...	.....	...	76 8 0	...	.....	...	131 8 0
GONDAH	Crude Saltpetre	149	298 0 0	...	... .	149	298 0 0	315	630 0 0	1	0 8 0	316	630 8 0	167	332 8 0	...	.....
	Kharee	15	30 0 0	...	.....	15	30 0 0	24	48 0 0	...	.....	24	48 0 0	9	18 0 0	...	.. ..
		164	328 0 0	...	....	164	328 0 0	339	678 0 0	1	0 8 0	340	679 8 0	176	350 8 0	...	....
	Refineries	7	350 0 0	...	.....	7	350 0 0	6	300 0 0	...	.....	6	300 0 0	...	.....	1	50 0 0
		...	... .	...	.....	...	678 0 0	...	.....	...	.....	...	978 8 0	...	350 8 0	...	50 0 0
TOTAL ...	Crude Saltpetre	346	692 0 0	...	.....	346	692 0 0	565	1,130 0 0	3	1 8 0	568	1,131 8 0	222	439 8 0	...	.....
	Sujjee	64	128 0 0	...	.....	64	128 0 0	18	36 0 0	...	.....	18	36 0 0	...	.....	46	92 0 0
	Kharee	135	270 0 0	...	.....	135	270 0 0	127	254 0 0	...	.....	127	254 0 0	...	.....	8	16 0 0
	Total ...	545	1,090 0 0	...	... .	545	1,090 0 0	710	1,420 0 0	3	1 8 0	713	1,421 8 0	222	439 8 0	54	108 0 0
	Refineries	27	1,350 0 0	...	.....	27	1,350 0 0	35	1,750 0 0	...	.....	35	1,750 0 0	8	400 0 0	...	.....
	GRAND TOTAL	....	...	.....	...	2,440 0 0	...	.....	...	.....	...	3,171 8 0	...	839 8 0	...	108 0 0	
	DEDUCT DECREASE	... .	...	... .	...	.. ..	...	.. ..	...	.....	...	.....	...	108 0 0	...	.....	
	NET INCREASE	.....	...	.....	...	.....	...	.....	...	.....	...	.....	...	731 8 0	...	.....	

F. W. VERE,
Depy. Commr. of Inland Customs.

APPENDIX F.
INTERNAL DEPT.,
OUDH.

ANNEXURE D.

Licenses of both Letters refused.

Name of Circle.	A.	B.
Lucknow	126	...
Oonao	21	1
Pertabgurh...	15	...
Gondah	30	...
Total ...	192	1

F. W. VERE,
Deputy Commr. of Inland Customs.

ANNEXURE E.

Seized for working without Licenses.

Cases.				Men.				Committed for trial.							
								Cases.				Men.			
1866-67.	1867-68.	1868-69.	1869-70.	1866-67.	1867-68.	1868-69.	1869-70.	1866-67.	1867-68.	1868-69.	1869-70.	1866-67.	1867-68.	1868-69.	1869-70.
43	11	17	15	66	11	35	20	35	9	13	15	58	9	29	20

F. W. VERE,
Deputy Commr. of Inland Customs.

Appendix G.

Details connected with the Sooltanpoor Salt Works.

(Extracts from a Report by Baboo Kalee Narain Roy, Patrol, Sooltanpoor).

43. I beg to notice the out-turn of the salt works attached to this beat. The products of the past year, 1869-70, amounted to maunds 6,23,309·33, being 12·44 per cent. below those of 1868-69.

Year.	Annual out-turn.
	Maunds.
1869-70	6,23,309·33
1868-69	7,11,934·26
1867-68	5,76,907·89
Corresponding 12 months of 1866-67	6,72,902·42

The season for the production of salt was very unfavorable during the past year, specially during the months of July, September, October, and even in December 1869, on account of heavy showers that fell at short intervals during the above months. While, during the preceding year, 1868-69, the weather being dry and favorable, salt was produced plentifully even in the rainy seasons; although, as will be seen in the annexed Statement, the salt works have progressed, the number of wells and pans having increased, still the season was so unfavorable as to have affected seriously the produce of salt.

Again, during the preceding year, 1868-69, owing to the drought, the bullocks being employed in the salt works suffered very little from starvation, as the manufacturers had a sufficient store of fodder, with which they managed to feed them till the end of the year, and the bullocks were kept in pretty good condition. But, in the beginning of the past year, when all stores were exhausted, and when fodder was almost unprocurable at any price, some of the bullocks died by starvation, and others were reduced to skin and bone. Therefore, the work of the salt works was somewhat neglected till the month of August 1869, when, again, the season being favorable, fodder became plentiful, and the bullocks began to recover strength. The death of many bullocks, and the enfeebled condition of the rest, contributed also to cause a decrease in the produce.

44. I proceed now to enter into further details. The subjoined Statement has accordingly been prepared to exhibit the

annual out-turn and sales of each cluster of salt works separately with the selling price during the past year:—

Name of Salt Work.	Balance of stock on hand on the 1st April 1869.	Annual out-turn of 1869-70.	Total.	Quantity sold during the year 1869-70.	Stock on hand on the 1st April 1870.	Selling price per maund for the year 1869-70.
	Maunds.	Maunds.	Maunds.	Maunds.	Maunds.	Rs.
Mobarickpoor	32,202·99	2,05,140·07	2,37,343·05	2,16,613·69	20,729·36	·73
Busseerpoor	5,267·38	98,166·44	1,03,433·81	87,203·94	6,229·87	·71
Sooltanpoor	8,500·34	81,012·31	89,512·65	71,223·	18,289·65	·72
Sadrana	2,845·4	61,962·14	64,807·54	59,230·96	5,576·58	·5
Balpoor	4,147·12	48,856·37	53,003·5	43,212·75	9,790·75	·51
Kalliawas	388·87	6,724·75	7,113·62	6,181·28	932·34	·48
Saidpoor	2,505·9	6,600·3	9,106·2	8,030·75	1,075·45	·59
Mahmoodpoor	825·37	20,950·25	21,775·62	19,614·62	2,161·	·59
Zahedpoor	581·28	75,890·12	76,471·4	72,208·56	4,262·84	·42
Sylana	2,434·65	18,006·58	20,441·24	14,442·5	5,998·74	·41
Total ...	59,699·3	6,23,309·33	6,83,008·63	6,07,962·05	75,046·58	5·66
Average selling price per maund for 10 salt works						·57

Comparative Statement exhibiting increase or decrease in the annual out-turn of each salt work separately for the year 1869-70.

Name of Salt Work.	Annual out-turn of 1869-70.	Annual out-turn of 1868-69.	Increase.	Decrease.
			Quantity.	Quantity.
	Maunds.	Maunds.	Maunds.	Maunds.
Mabarickpoor	205,140·07	2,95,028·92	.....	89,888·85
Busseerpoor	98,166·44	1,09,974·97	.....	11,808·53
Sooltanpoor	81,012·31	95,156·05	.....	14,143·74
Mahmoodpoor	20,950·25	18,300·25	2,650·	.....
Saidpoor	6,600·3	3,468·02	3,132·28	.....
Sadrana	61,962·14	52,632·12	9,330·02	.....
Balpoor	48,856·37	38,791·25	10,065·12	.....
Kalliawas	6,724·75	4,943·53	1,781·22	.....
Zahedpoor	75,890·12	76,361·92	.....	471·8
Sylana	18,006·58	17,277·22	729·36	.. ...
Total ...	6,23,309·33	7,11,934·26	27,688·01	1,16,312·94
Deduct Increase ...	.....	.....	.....	27,688·01
Net Decrease ...	.....	.....	.....	88,624·93

45. It will be seen in the above comparative statement of the annual produce of each salt work, that in all the large salt works, where the hakimee cess was taken at a high rate, there has been a decrease in produce; whereas, in the small salt works, where the cess was taken at a low rate, an increase has been exhibited. This evidently shows that the imposition of a heavy cess, and the oppressive manner of obtaining it by the contractors, have affected the prosperity of the works.

DETAILS CONNECTED WITH THE SOOLTANPOOR SALT WORKS.

The following comparative statement will show the number of wells and pans in each salt work separately attached to the Sooltanpoor salt works :—

Name of Salt Work.	Numbers that were in work at the end of Year 1869-70.		Numbers that were in work at the end of Year 1868-69.		Increase.		Decrease.	
	Wells.	Pans.	Wells.	Pans.	Wells.	Pans.	Wells.	Pans.
Mobarickpoor ...	78	1,108	69	1,067	9	41	...	...
Busseerpoor	37	585	39	557	...	28	2	...
Sooltanpoor	40	457	37	443	3	14	...	...
Sadrana	25	319	22	315	3	4	...	...
Balpoor	15	236	15	245	...	...	...	9
Kalliawas	3	45	3	45	...	...	...	...
Saidpoor	8	75	7	67	1	8	...	...
Mahmoodpoor ...	13	147	16	153	...	...	3	6
Zahedpoor	13	708	13	463	...	245	...	...
Sylana	8	170	8	104	...	66	...	...
Total ...	240	3,850	229	3,459	16	406	5	15
Deduct Decrease	...	...	...	...	5	15	...	...
Net Increase ...	...	...	...	...	11	391	..	...

46. Prices in depôts, &c., both above and below line. Prices. General fluctuations.

Here I have to notice, that the price of Sooltanpoor salt, both above and below line, varied notably during the past year; beginning from April 1869 at an average rate, below line 3·93 annas and above line ·52 annas per maund, it very slightly fell in May 1869 to 3·87 below, and ·48 annas above line; when from June it again steadily rose till January 1870 and reached 4·12 per maund below, and ·76 annas per maund above line, (that is, at the works) when it again declined in February 1870, until by the end of the year it reached 3·87 below and ·48 annas above line per maund.

47. The sub-noted table shows the variation in price, above line at the salt sources and at the leading mart below line, during each month of the past year with averages :— Details. Salt.

Month and Year.	Prices of Sooltanpoor Salt at the leading marts, per maund.			
	Above Line.		Below Line.	
	Sooltanpoor Salt Source.	Average.	Delhi.	Average.
	Annas.	Annas.	Annas.	Annas.
April 1869	·49	·49	3·94	3·94
May „	·45	·45	3·88	3·88
June „	·48	·48	3·87	3·87
July „	·45	·45	4·06	4·06
August „	·49	·49	4·12	4·12
September „	·52	·52	4·12	4·12
October „	·64	·64	4·19	4·19
November „	·65	·65	4·19	4·19
December „	·72	·72	4·19	4·19
January 1870	·73	·73	4·12	4·12
February „	·59	·59	4·	4·
March „	·48	·48	3·88	3·88
Total	6·69	6·69	48·56	48·56
Average	·56	·56	4·05	4·05

DETAILS CONNECTED WITH THE SOOLTANPOOR SALT WORKS.

Statement showing the monthly selling price per maund of each salt work separately for the year 1869-70.

Month and Year.	Selling price of Sooltanpoor salt per maund at salt source.												Selling price of Sooltanpoor salt below Line.
	Mobarickpoor.	Sooltanpoor.	Saidpoor.	Sadrana.	Balpoor.	Busserpoor.	Kalliawas.	Mahmoodpoor.	Zahedpoor.	Sylana.	Total.	Average of selling price.	Delhi.
April 1869 ...	·6	·57	·52	·44	·46	·6	·42	·52	·41	·41	4·96	·49	3·94
May ,, ...	·59	·56	·47	·37	·44	·58	·33	· 5	·35	·34	4·53	·45	3·88
June ,, ...	·6	·63	·5	·42	·44	·63	·33	· 5	·37	·38	4· 8	·48	3·87
July ,, ...	·61	·68	·5	·34	·44	...	...	· 5	·27	·27	3·61	·45	4·06
August ,, ...	·73	·73	...	·33	..	...	..	..	·38	·32	2·49	·49	4·12
September ,, ...	·73	·8	...	·46	·39	...	..	·58	·38	·31	3·66	·52	4·12
October ,, ...	·83	·8	·6	·6	·53	·8	·6	·53	·5	·5	6·29	·64	4·19
November ,, ...	·9	·8	·66	·62	·6	·8	·6	·66	·5	·5	6·66	·65	4·19
December ,, ...	·96	·97	·75	·44	·62	·89	·55	·76	·59	·59	7·10	·71	4·19
January 1870 ...	·84	·82	·75	·77	·64	·82	·6	·70	·6	·6	7·24	·72	4·12
February ,, ...	·72	·69	·62	·65	·53	·69	·49	·65	·45	·45	5·94	·59	4·
March ,, ...	·66	·65	·52	·54	·5	·59	·42	·54	·2	·2	4·82	·49	3·88
Total	8·77	8·7	5·89	5·98	5·59	6·4	4·34	6·53	·5	4·87	...	6·68	48·56
Average ...	·73	·72	·59	·5	·51	·71	·48	·59	·42	·41	..	·56	4·05

(Sd.) KALEE NARAIN ROY,
Patrol, Sooltanpoor.

Appendix H.

Report on the Mayo Salt Mines, Khewrah Salt Range.

With three maps appended showing :—

No. I.—Geological Sketch Survey of the environs.

„ II.—Survey of the salt mines hill with contour lines.

„ III.—Survey of the Mayo Salt Mines with future working plan.

The Report is in five parts :—

1. Geological description of the environs.
2. Description of the hill in which the Mayo Salt Mines are situated.
3. Description of the salt mines and the present mode of working.
4. Description of the future working plan.
5. Chemical analysis of the salt.

1.—*Geological description of the environs of the Mayo Salt Mines with Map No. I.*

GEOLOGICAL DESCRIPTION OF MAYO SALT MINES AND ENVIRONS.

1. One conformable series of strata occur in the neighbourhood of Khewrah, which we call the sandstone and salt formation of the salt range.

Sandstone and Salt formation.

2. This formation is far the most prevalent. Of much less importance, where the salt mines are concerned, is the nummulitic limestone formation, which overlies the other, and appears only, in small parts, in the immediate neighbourhood. Another formation, that is, the coal formation of the salt range, occurs only in traces. We have a recent formation on our map, that of debris from destroyed strata of the salt formation. There is also trap, but in such small quantities, and cropping up so frequently, that I had no time to bring all the out-croppings on the map.

Division of Strata.

3. The sandstone and salt formations are divided on the map into altogether seven different strata.

The following are all the strata from above downwards :—

Strata.		Thickness.	Average.
Recent form—Debris of Gypsum, &c.	...	100′—200′	150′
Limestone form—Nummulitic limestone	...	...	200′
Coal formation—Coal, Alumshale and Marl	...	...	20′
Sandstone formation. Green Sandstone	...	...	600′
Sandstone formation. Blue marls ...	...	100′—150′	125′
Sandstone formation. Red Sandstone ...	...	400′—800′	600′
Salt formation—Upper layer of white Gypsum		5′	5′
Brick-red marl, or Gypsum	...	60′—200′	130′
Brown Gypsum ...	...	80′—200′	140′
Lower layer of white Gypsum	...	200′	200′
Salt marl and salt	...	600′	600′

Volcanic—Trap piercing through the lower strata up to the boundary between the upper layer of white Gypsum and red Sandstone.

The total thickness of the—

Sandstone formation is ..	...	1,325 feet.
Salt formation ...	...	1,075 „
Total sandstone and salt formations	...	2,400 feet.

4. The most characteristic strata of this formation are the green sandstone and the brick-red gypsum. The former constitutes the crown of all the heights. The brick-red gypsum crops out on the base of the hills, and in the gorges, and is the indicator of the salt formation all over the salt range. There are enormous quantities of brick-red gypsum at Khewrah, not only low down in the gorges, but high up towards the summit of the hills, indicating the enormous riches of salt within them.

5. The Geological Sketch Survey, Map No. I, consists of one ground plan and three vertical sections.

SUPERFICIAL STRUCTURE OF THE ENVIRONS OF THE MINES.

6. The superficial structure of the neighbourhood is as follows:—

The base of the hills extends from west to east. The plains extend to the south. A large gorge, the Mitthapatan, or Khewrah Gorge, stretches through the midst of the hills from north to south. This gorge has various side gorges. On the right side Girum Kass, Keari Kass, Ghamma Kass, Gaeder Kass. On the left side, Attral Kass, (this is not down on the map), Kalre Kass, Little and Great Bhunder Kass, Biliwalla Kass, Nerwary Kass and Utschle Sowri Kass. Parallel to the Great Khewrah Gorge are the Sandre Kass and Malkana Kass, both on the east. To the west we have another large gorge running from east to west, called Daleeri Kass. This Daleeri Kass has three side gorges running up to the right, the Jaleeanwalla Kass, Atalra Kass, and Kalapanee Kass.

7. Two large hills form the northern boundary of our map, the Tobar hill and the Anhere. These lie in line with the other high part of the range and stand like two colossi one on either side of the Great Khewrah Gorge. The Anhere is towards the east connected with a range of other sandstone hills, which tend southwards, and become gradually lower in that direction, until they nearly reach the plains, and the eastern boundary of our map is therefore formed by sandstone hills like the northern boundary. To the south we have again two groups of sandstone hills on each side of the great gorge. On the right are the hills of Siroola, Ootti, and Mahré. The Drangur hill stands to the left. These hills, with the exception of Ootti, are all very low. One conical hill of sandstone stands in front of the eastern boundary of sandstone hills, and is called Dher. To the west beyond the boundary of our map, a break occurs in the hills running south, the plains cutting in between them. Within the circle of sandstone hills lies the great salt formation of Khewrah, which is here raised to a considerable height, so that the treasures of salt which it contains are easily accessible at a level above the water level of the gorges. The raised salt formation is divided by the Khewrah Gorge into two parts. The smaller part to the east consists of the Mayo Salt Mines Hill, and a small range of gypsum hills south of it. The larger part of the salt formation to the west consists of the hills, Niwri, Leenda, and Gitealli. The latter, especially, is very much higher than the Mayo Salt Mines Hill.

8. The geological formations extend themselves as follows:—

GEOLOGICAL FORMATION.

Limestone.

Great masses of limestone are deposited above the green sandstone in the north of Tobar, Anhere, &c. We also very soon reach this formation, when going up the Khewrah, or Mitthapatan Gorge, a little further northward than our map illustrates. On the map the limestone appears at four places, *viz.*, behind Tobar,

above Anhere, at Rutteebunny, or Chowkee 21, and east of Nerwary, between Dherand Drangur.

Green Sandstone.

9. The green sandstone, as mentioned before, crowns all the heights, except those of the salt formation, and is found on the summits of all the sandstone hills just described, and also exists in large quantities on Drangur. The two other strata of the sandstone formation, the blue marl and the red sandstone, form annular belts round the green sandstone. The blue marls form a narrow ring, the red sandstones a wider one. All the latter, east of the gorge, forms one continuous tract, if we except two very small bits on the top of the Mayo Salt Mines Hill. West of the great gorge, we have a continuous tract of red sandstone, running due north and south.

Salt Formation.

10. The salt formation begins with the brick-red gypsum, if we omit the small layer of white gypsum which mostly, but not invariably, occurs between the brick-red gypsum and the red sandstone. The brick-red gypsum crops out on the south side, on the slope of the hills towards the plains, and again far up in the Khewrah Gorge below the sandstone formation. It surrounds the great raised centre of the salt formation, and for the most part covers it. The red gypsum is a most peculiar brick-red coloured mixture of clay and crystallized gypsum. One might as well call it brick-red marl, but I prefer the former expression, because the gypsum is the principal constituent of the mixture. Below the brick-red gypsum, the brown gypsum appears. This mixture is similar in composition to brick-red gypsum; there is only a difference in the colour, that is, it is brown instead of brick coloured. Large masses of this so-called brown gypsum appear in the Khewrah or Mitthapatan Gorge, between Kalre Kass and Bhunder Kass on the left side, and opposite these again on the right side of the gorge at the foot of Tricki hill. Much brown marl appears up along the Bhunder Gorge, and still more all up Keari Gorge. Below the brown gypsum lies a thick layer of white gypsum. This is coloured on the map with cobalt blue, the same as the small layer which occasionally occurs between the brick-red gypsum and the sandstone formation. We call the latter the upper, and the former the lower white gypsum. These lower strata are much developed in the Bhunder, Malkana, and lower end of the Biliwalla Gorges. There are also complete hills of it, one south of the Deputy Collector's bungalow, opposite to Leenda and Gitealli, and another further to the south, the "Lari Lara Ke Kabar." (Name derived from the plunder and murder of a marriage procession). There is a nearly continuous formation of this stratum extending from Biliwalla Gorge to Malkana Gorge, all along the slope of the hills west and south of Drangur, which includes layers of limestone perforated with small holes. This latter which is only a few feet thick, but very pure, occurs in the Bhunder Gorge, in Malkana Gorge, and even in the lower part of Biliwalla Gorge, &c. The Gitealli hill takes its name from the large quantity of small pieces of this limestone lying about on its summit.

Salt Marl.

11. The next deposit below the gypsum is the salt marl which includes the strata of pure workable salt. It appears on the surface at the following places:—On the Mayo Salt Mines Hill, on the south-west side extending from above Buggy mine to below Phurwalla mine, on the south-east side of the Mayo Salt Mines Hill, between Soojewal mine and the old Chingwala mine, and beyond Chingwalla. The salt seam also crops out in the fresh

water drain above Soojewal, and in the deep cutting of the road from the Mundi to Soojewal, east of Biliwalla mine. The next considerable outcropping is at the foot of Mount Leenda. Opposite this place on the left side of the gorge along the foot of the gypsum hill, near the Deputy Collector's bungalow, the salt shows itself at various points, proving its uninterrupted connection. The salt in former times must have extended over the gorge, and its removal by water may have very much contributed to the formation of the Khewrah Gorge. There is also salt up at Niari, for on the left side of the road going up the hill very near No. 31 Chowkee, a single block of salt is to be seen amongst the debris, twenty feet above the base of the Khewrah Gorge, at the mouth of Ghamma Kass. Crossing over these hills to the west, we find at their foot, in the Daleeri Gorge, two groups of old salt mines, and still further to the west we see salt cropping out in the gorge itself. An entirely detached piece of salt similar to that in Ghamma Kass is also visible on the road from the Mundi to Soojewal to the right near the Soojewal Chowkee. This piece of salt lies in the debris of gypsum and salt marl. These are all the places where salt crops out, except in one instance, which is most interesting. In Kabra Kass, contrary to all rules, the salt crops out for a length of forty feet between the brick-red gypsum and the red sandstone.

Salt brine.

12. Salt brine is an invariable companion of the salt in the range.

Stream of sweet water.

13. The Great Khewrah or Mitthapatan Gorge brings a small stream of perfectly sweet water from the limestone strata near Choah. This stream is intercepted at a place in the midst of the red sandstones by a weir built across the gorge, from which the sweet water is carried down the gorge to the village of Khewrah by an aqueduct. Below it, yet in the reach of the red sandstone, the water becomes saltish, and more and more so, till it leaves the hills a perfect brine. There is a very small well of saltish water in the upper part of Biliwalla, south of Chingwalla, on the left side of the gorge. It comes, therefore, out of that range of hill which lies between Biliwalla and Nerwary. There is also salt water in the Daleeri Kass, and sweet water comes from a well high up at Kalapanee. During all seasons there is also sweet water in the Sandree Kass.

Debris formation.

Its composition.

14. An important, although quite recent formation, remains to be spoken of, that is, the formation of debris from disintegrated strata of salt marl and gypsum, mixed with clay, into a compact mass, very hard when dry, and consisting of gypsum, the above-mentioned limestones from between the gypsum, red and green sandstones, and brown clay, which in some instances even contains great pieces of pure rock salt. The largest masses of this formation lie on the south and west sides of Mayo Salt Mines Hill, where in course of time, large strata of salt marl have been washed out. Another large deposit of this debris is in Daleeri cut through by various side gorges. The old mines in Daleeri lie behind this debris, some of which is also met with on the slope of Niwri hill, where the salt crops out near Chowkee 31.

VOLCANIC FORMATION—TRAP.

VOLCANIC FORMATION. Trap.

15. Black trap filled with stellated crystals appears all over the great salt formation. It always crops out on the top of the

brick-red gypsum, on the small layer of white gypsum, between brick-red gypsum and red sandstone. The quantity is nowhere great, and sometimes the veins are scarcely one foot thick. The number of places where it appears is so great that I would not have had sufficient time to show them all on the map. It is found nearly everywhere between the salt and sandstone formations; for instance, high up in Mitthapatan Gorge, at the mouth of Attral Kass, on the north side of Mayo Salt Mines Hill, and all over the brick-red gypsum, and white gypsum, from Nerwary to the upper end of Bhunder Gorge, also upon Niwri, &c., &c.

16. It has not been met with in the mines, but there is no doubt that some time or other it will be found there, because it must have forced its way through the salt strata in order to appear on the surface of the brick-red or upper white gypsum.

STRIKE AND FALL OF THE STRATA.

Strike and Fall of strata.

17. There are two causes which have determined the ultimate position of the strata in the environs of Khewrah. The one is the general elevation of the salt range striking from east to west, and the other, the special elevation of the salt formation on both sides of the Khewrah Gorge. This latter elevation must have taken place simultaneously with the eruption of the trap. The great sandstone hills in the north, Tobar and Anhere, fall to the north. The southern sandstone hills, Drangur, Siroola, and Mahre, fall gently to the south. Those hills which form the eastern boundary lie generally horizontally (see the three vertical sections on Map No. I). Corresponding to the sandstone strata lie those of the salt formation, directly below. In the midst of the belt of sandstone hills is the great raised centre of the salt formation, which is divided unequally by the Great Khewrah Gorge. The strata of this central salt formation fall northwards and southwards and dip below the sandstone strata in the east, gradually dipping also at their western extremity towards the west. The eastern part of the salt formation is cut into very deeply by the Biliwalla Gorge, and large salt strata must have formerly existed, which are now destroyed, and have only left great layers of debris behind, (see vertical section C D). The western part seems still to be covered up. The middle gorge, Ghamma Kass, which corresponds to Biliwalla Kass, is not cut into so deeply, and the salt layers below must be now lying undisturbed corresponding with the treasures of salt which we must suppose to exist below the highly raised Gitealli, Leenda, and Niwri; but it is doubtful if the pure salt itself is raised so high, everywhere, as to allow of exploration: the following are some of the irregularities in the position of the strata:—

18. The thick layer of gypsum below the Deputy Collector's bungalow, which ought to fall to the south, starting from the midst of the raised salt formation, lies nearly horizontal, and, when approaching Biliwalla Gorge, sinks rapidly to the north. The same set of this layer is noticed near Leenda, opposite the Deputy Collector's bungalow. There has, however, been very great destruction amongst the strata there, most probably caused by previous out-washing of the underlying salt strata, by the water of the Khewrah Gorge. No irregularity exists along the gorge at this place. The strata of gypsum,

irregular as their positions are, are identical on either side of the gorge between Leenda and the Deputy Collector's hill. The same polished stones which are found at the foot of Leenda in the gorge are also found opposite, along the road below the Deputy Collector's bungalow.

19. The very high peak, Ootti, consists of layers of green sandstone which are raised nearly vertical. Corresponding with these the red sandstone north of them is also in an upright position. At some places in the Gaeder Gorge it is even turned beyond the vertical, so that the brick-red gypsum which follows it seems to overlie it, whilst its position *must* be below it. Section A, B on the map is drawn across Ootti, Gaeder Kass, and Gitealli.

20. Between Atalra Kass and Kalapani Kass lies, in the midst of red sandstone, a detached piece of blue marl, which looks as if it had slipped down to that place from a higher point.

21. There are no known strata at this place underlying the salt strata. The thickness of the latter is calculated at 600 feet from measurements of the Mayo Salt Mines Hill, but we have never reached the bottom of the strata there. The number of these is five, but some of them might on future exploration prove to be identical, and thus the real thickness of the known strata would be less than as above estimated.

22. The Mayo Salt Mines Hill is isolated by gorges on three sides, and on the fourth, which is not so much isolated, the strata dip down under the sandstones in such a way that the salt gets out of reach of exploration by the present mode. The probable extent of the strata of the Mayo Salt Mines is therefore pretty accurately known from all sides. The area over which salt can exist, above the level of the Khewrah gorge, is seen in Sections E, F and C, D, Sections A, B and E; F show also the supposed area of the reachable salt strata west of the Khewrah Gorge, and we find that the area of the latter is equal to four times that of the former. The distance from Chowkee No. 31, where salt crops out on the eastern slope of Niwri, to the nearest old mines on the western slope of Gitealli, is a whole mile, and over all this space we must expect the salt on both sides to be connected.

23. The thick salt seams in which the mines are worked, are built up from successive smaller layers of salt. These layers we may properly call year-rings or annual formations. Each layer represents the formation of salt in the great brine lake during the period of one year.

24. These annual deposits vary in thickness from half a foot to two feet. The salt is whiter in the middle of the layer than elswhere. The edge of the layers is red, and clay even occurs, more or less, between some of them. At some places the clay between the year-rings is impregnated with epsom salt which shows itself in the form of an efflorescence. As we shall see hereafter, at one place in Phurwalla mine, an extraordinarily large quantity of Epsom salt is accumulated in a marl which covers the Phurwalla salt seam.

MINERALS.

25. The following minerals are found in the environs of Khewrah :—

Coal and Alum shale.

Coal and Alum shale.

26. The coal is found with alumshale at Rutteebunny, the former one foot thick, the latter two feet thick overlying the coal.

MINES, KHEWRAH SALT RANGE.

27. It seems that the formation to which this coal belongs is independent of the sandstone and the limestone formations, and only occasionally appears between them. About four miles north-west from Khewrah are the coal mines of Pid, where coal has been worked for some time out of a seam four feet thick. At this place layers of limestone with graphites lie immediately above the coal formation. Some laminated coal or coal-slate is found even in Khewrah gorge at the mouth of Attral Kass, north of Kalri Kass. It is, however, very difficult to say what formation it belongs to.

SALT.

28. *Salt.*—The salt which is worked out from the Mayo Salt Mines is of a purity such as few known salt mines of the earth can yield. There is no such salt in England, nor in most mines on the Continent. Sometimes beautiful clear crystals are found several inches in diameter.

The colour of the salt from the mine is generally red (brick-colour), but sometimes more or less white.

For chemical analyses of Lahore salt and of the Khewrah salt, see page 90.

EPSOM SALT.

Epsom salt.—Sulphate of magnesia is found in very small quantities between the salt layers, and in a larger quantity in the salt marl at a certain place in Phurwalla mine.

GYPSUM.

Gypsum.—This constant companion of all salt layers is in abundance at Khewrah.

White gypsum, brick-red gypsum, and gypsum in crystals or selenite are there in great quantities.

The white gypsum of Khewrah makes a good plaster and is also used for masonry. No anhydrite has been found up to the present time.

CALCITE.

Calcite.—Carbonate of lime,—incrustations one inch thick, of a beautiful white colour,—are found on the top of some hills in the green sandstone strata.

TRAP.

Trap.—Trap is found at many places. It is of a black colour and full of stellated crystals.

In the trap is found—

QUARTZ IN CRYSTALS AND NODULES.

Quartz in nodules—Of half an inch in length. *Quartz crystals* of a reddish colour, half an inch thick, are met with between the gypsum and red sandstone. Some of the crystals which I found were enclosed in gypsum.

IRON PYRITES.

Iron pyrites—Are found in the coal, in the limestone, and in small quantities in the gypsum.

IRON ORE.

Iron ore.—Hydrous oxyde of iron is found in the nummulitic limestone in the form of decomposed crystals of iron pyrites. There is also a layer of very weak iron ore on the base of the nummulitic limestone. It is mixed with a hard clay which contains no lime.

This iron ore appears at Rutteebunny in large quantities. I also met some of it near the coal mines at Pid.

GALENA.

Galena.—Sulphide of lead is found in small cubes of one-eighth to one-fourth inch thickness on the green sandstone hills. It is contained in a dolomitic sandstone, and by decomposition of the latter is spread in small quantities over the ground on the slope of several hills. I found the mineral on the northern slope of the Siroola hill. The natives gather the galena and use it in a finely powdered state as a remedy for inflamed eyes.

WASHING CLAY.

Washing clay.—A clay is dug out by the natives at various places, and used for washing cloth. The substance is of a violet colour and may be the result of decomposition of trap. It is found in the strata of the lower white gypsum.

POLISHED STONES.

Polished Stones.—Stone slabs with beautifully polished black surfaces are found between the layers of gypsum at the foot of the Leenda hill in the Khewrah Gorge. The same slabs, but not of such great beauty, occur also on the opposite side of the gorge below the Deputy Collector's bungalow.

CASTS OF SALT CRYSTALS IN SANDSTONE.

Casts of salt crystals in Sandstone.—Very interesting is the occurrence of the casts of salt crystals on sandstone slabs in the upper green sandstone formation. The very same pseudomorphous crystals are found in Cheshire above the salt formation, and in Germany they appear in the Keuper formation which overlies the salt-bearing muschelkalk. The formation of the crystals is explained in the following way :—

On a flat shore covered with a layer of freshly deposited mud after the evaporation of the salt water, the resulting salt crystals were formed in the mud in such a way that half of their surface was exposed and the other half lay buried. Further evaporation caused the mud to harden. After this had happened the level of the sea-water again rose, and the tide flowing over the hardened mud dissolved the crystals, bringing sand which was deposited in a thin layer over the mud. This sand also entered into the spaces left by the dissolved crystals, forming casts of them. Other layers of mud and sand settled upon the first ones, and the same process of crystallization may have been repeated or not. In the hardened state in which we now find the layer,—the mud as marl, the sand in the form of sandstone slabs,—the casts of the crystals are all found as they ought to be found, *i. e.*, on the *lower* side of the sandstone slabs. They appear when the marl is washed away by the rain. Some crystals are very beautiful and show that pyramidal form which is so characteristic of salt produced by evaporation.

II.—*Description of the hill in which the Mayo Salt Mines are situated (with Map No. II.)*

DESCRIPTION OF THE MAYO HILL.

29. The Mayo Salt Mines Hill is bounded on the west by the Great Khewrah Gorge, on the north by the Great Bhunder Gorge, and on the south by the Biliwalla Gorge. On the eastern boundary the side gorges of Bhunder and Biliwalla have a watershed between them by which the hill is connected with the sandstone hills eastwards. The upper part of the hill, which is represented by the 600 feet contour line, is of oblong shape, extending east-south-east to west-north-west and depressed on the south. On the south side the hill is at first very steep and afterwards falls gradually towards the Biliwalla Gorge, which is 50 to 100 feet deep. On the north the hill slopes very gradually from the summit and then falls down so abruptly to the Bhunder Gorge that, for the greater part, it is impossible for one to descend into from the hill. The south-western slope of the hill is partly occupied by the village of Khewrah. The rest of the village with the Government buildings occupies the space between the Great Khewrah and Biliwalla Gorges.

Government Buildings.

30. The Government buildings consist of a salt-weighing house, 130 feet long and 45 feet wide, with four pairs of scales; Moonshee's barracks on a space 130 feet long and 110 feet wide; and a serai 500 feet long. There are also two bridges on the

road to Pind Dadun Khan, a small one crossing the mouth of the Biliwalla Gorge and a very large one crossing the Khewrah Gorge (see Geological Map No. I).

Description of the mines.

31. Map No. II shows how far the different mines extend into the interior of the hill. The Buggy mine does not penetrate far into it, but only goes up to the 600 feet contour line and is still 1,000 feet from the centre of the hill. Phurwalla and Mukhad mines only occupy a small belt in the southern corner, outside of the 600 feet contour line. The Soojewal mine alone approaches the centre of the hill, but it cannot extend much farther to the north-west on account of the falling down of the strata. The other old mines are mostly still nearer the surface. On the whole northern side of the hill no salt at all crops out, but towards the south, the contrary is the case. The action of the water in the rains on the salt, or salt marl, is very considerable. Various measures had to be taken to protect even the mines at present worked from the destructive action of the water. There is a large crater in the gypsum above Soojewal (see 600 feet contour line). From the bottom of this crater holes are excavated by the water in some salt layers, and the outflow of the water through the hundred feet drift, which was made to drain the crater, is interrupted. When this drift is repaired, the fresh water will flow through it southwards, and be carried away by the drain, which is constructed behind the mouth of the Soojewal Tunnel. If the water had been left in the crater, and no outflow had been provided, a natural shaft might in a few years have been hollowed out by it right into the Soojewal mine. We have a large specimen of such a shaft in the so-called Kabuterketred, which goes down from the surface of the hill into Phurwalla mine and is 212 feet deep. Another very deep shaft has been formed by the water at a place south-east of the Phurwalla mine entrance and south-west of the Soojewal Tunnel entrance. This shaft is not so wide as Kabuterketred, and is as regular as if it had been made artificially. A very large crater of 200 feet diameter has been formed in the salt marl west of the Phurwalla mine entrance. There is a second crater, not quite so regular, south of the former. Several slips have also occurred on the steep side of the hill owing to the action of the water. One slip caused the falling in of part of the Thomson's drift, which leads into the Buggy mine. Another is ready to occur on the slope of the hill east of the Soojewal mine. There was a small drain made here, but without success. The place is just in the level of the 700 feet contour line, and on the map it is marked "Earth cutting for water drainage."

32. To the destructive action of the water on the salt hill is chiefly due the falling in of the old mines. We must therefore work the salt mines as safely as possible in future, not only for the sake of the miners, but also in the interests of Government.

III.—*Description of the Salt Mines and the present mode of working, (with Map No. III.)*

PRESENT MODE OF WORKING THE SALT MINES.

33. Embedded in the salt marls of the hill at Khewrah are the various thick seams of pure salt, which form the resources of the Mayo Salt Mines.

Mines now worked.

34. Those now worked are called the Buggy and Soojewal mines. The next largest excavations are the Phurwalla and Mukhad mines, neither of which are worked now, but are open,

Disused Mines.

and have been surveyed. There was another large mine, Chingwalla, east of Soojewal, but its entrances have fallen in. Very little is to be seen of the Biliwalla mine, and some others are mere holes, or are entirely covered up now, such as—

Fakira-ki-truddi.
Mutwalla.
Lawala.
Shaho, &c., &c.

The situation of all these mines is given on Map No. II. The vertical section through the four surveyed mines (Map No. III) shows the workable salt seams which are now known, in the following order from above downwards:—

	Salt. Feet.	Salt marl. Feet.
Buggy mine—Upper seam	25	...
Marl seam	...	10
Middle seam	100	...
Marl seam	...	25
Lower seam	50	...
Between Buggy and Soojewal, marl ...	...	100
Soojewal mine—Soojewal seam ...	50	...
Between Soojewal and Phurwalla, marl ...	...	140
Phurwalla seam ...	50	...
TOTAL THICKNESS ...	275	275

The Mukhad salt seam has only been surveyed to about 30 feet thick, but it is doubtless the upper and eastern continuation of the Soojewal salt seam.

Workable Salt Seams.

35. There are five workable salt seams, with an aggregate thickness of 275 feet. Between these lie salt marl strata, and thin, unworkable salt seams, in all at least 275 feet thick, making a total thickness of 550 feet. To these we may add 50 feet of marl over the upper Buggy salt seam and thus estimate the whole thickness of the known strata to be equal to 600 feet. It is, however, not quite certain if some of these strata may not in future be found to be identical with each other. It is certain, however, that the Phurwalla seam is not identical with that of Soojewal or Mukhad, because the Phurwalla mine lies immediately below the Mukhad mine. Yet there may be a relation between the Soojewal and Buggy salt seams. The Soojewal seam may not actually be connected with the Buggy seams, yet the former might be a detached part of the latter, separated by a fault in the stratum, and yet originally one and the same stratum. If this be the case we should not have to count so many seams. The question will probably be decided after a connection has been made between Soojewal and Buggy. For the working of the mines it is immaterial whether the strata of both are identical or not, because the manner in which both salt deposits are supposed to extend remains the same in either case. The position of the four surveyed mines is clearly shown by the ground plans (Map No. III). The size of the mines will best be conceived from the quantity of salt which has been excavated. Each cubic foot of excavation we take to equal $1\frac{1}{3}$ maunds of salt. It is not less than this, because the wasted small salt

which lies on the floor of the mines is already deducted and is not added to the excavated space. The following are the dimensions and contents of the four surveyed mines :— Dimensions and contents of the four surveyed mines.

Mine.	Buggy.	Soojewal.	Phurwalla.	Mukhad.
Length parallel to the strata in feet	350	800	800	400
Width in the slope in feet ...	125	350	125	150
Thickness of the excavated stratum in feet	192	30	30	30
Cubical contents	84,00,000	84,00,000	30,00,000	12,00,000
One-fourth deducted for pillars ...	21,00,000	21,00,000	.....	.....
Remaining cubical contents ...	63,00,000	63,00,000	30,00,000	12,00,000
Maunds of salt ($1\frac{1}{3}$ per 1 cubic foot)	84,00,000	84,00,000	40,00,000	16,00,000

Total of maunds in the four mines ... 2,24,00,000, equal to 1,68,00,000 cubic feet of excavated space.

36. Under British rule, from 1850 up to 1870, there has been a quantity, amounting to one hundred and fifty-four lakhs* of maunds taken out. This, however, has not been procured from these four mines only; a large quantity has also been extracted from Chingwalla and other inferior mines. Quantity of salt extracted under British rule.

* Para. 83.

37. There is a large quantity of small salt lying waste in the mines, because the traders cannot use it. The now accumulated small salt, as well as all that will result from the future excavations, would at once come into use when railway communication should be established. From Soojewal alone, at the very least, fifteen lakhs of fine salt could be extracted, with no further expense than that of removal. *Small salt now unused will be utilizable in future.*

38. Taking into account all the other small mines, we may estimate the whole amount of salt taken out of the Mayo Salt Mines Hill up to the present time at 300 lakhs of maunds. Estimate of salt obtained from the Mayo Hill Mines.

Description of the four surveyed mines.

39. The Mukhad mine, situated above Phurwalla, occupies the southern corner of the salthill, and lies south-east of Buggy and south-west of Soojewal. Its entrance is 361 feet above the zero point in the mouth of Biliwalla Gorge, and the mine itself is so situated that the seam in which it is worked must be considered as the south-western continuation of the Soojewal salt seam. The entrance drift, 300 feet long, is narrow and very irregular. The eastern end of the mine I saw in April, and the roof became afterwards so dangerous that no ingress to that point was possible when the survey was made. I therefore only surveyed the western chamber of the mine and the entrance. There may be other workings to the north belonging to this mine, but they could not be entered. As far as *they* extend, the future working field of Soojewal mine is consumed. The strata in the mine dip towards the north-east. MUKHAD MINE. *Description of*

40. The eastern end of the mine must be very near the Matthew's drift of the Soojewal mine and could be easily connected with this drift, but that there is no necessity for it now. The whole south side of the mine is very near the surface of the hill. In Plan III the outlines of Mukhad mine are drawn in blue, to distinguish them from the Phurwalla mine below.

PHURWALLA MINE.

41. Phurwalla mine lies in a distinct salt seam, 200 feet deeper than Mukhad. The entrance starts outside from a level of 235·5 feet. The average level of the floor of the workings is little over 100 feet. The salt had therefore to be raised by the men in the drift to a level difference of much more than one hundred feet. The drift is about 400 feet long, and is not only steep, but also very uneven. It is very narrow and crooked besides, and yet by this road men and women and children have carried forty lakhs of maunds of salt out of Phurwalla. Most of the roof is very dangerous and ready to fall in. There is a pool of brine in the mine, between which and the beginning of the narrow eastern chamber there is a regular heap of fallen debris and large rocks of salt piled up; the roof has become much higher here by the falling in of these masses. From this heap a little further east and on the north side of the mine are some well preserved workings, which show that a quantity of salt still remains undisturbed on this side. Some workings extend also to the north, but they have been flooded by brine. The level of the surface of the brine in the pool is now 84·9 feet above zero in the Biliwalla Gorge. The pool has an influx from the Soojewalla mine. This latter having been endangered by water, the Public Works Department made a drift from it down to this place, as shown on the map. At the present level of the brine in Phurwalla the mouth of the drift dips, so that there is no communication between Phurwalla and Soojewal except through and under water.

Description of

Road from Phurwalla to Kabuterketred.

42. A narrow road leads from Phurwalla to Kabuterketred. This is a large natural shaft, formed by the dissolving action of the water. It is 212 feet deep, and at the base 60 feet wide. From the bottom to the top of Kabuterketred, it is evident that nearly all the sides run through salt, but the muddy state of the surface does not permit me to say whether and how many workable salt strata there are. There is an abundance of sulphate of magnesia, or Epsom salt, in Phurwalla. At a place marked "Sulphates" on Map III, south of the brine-pool, there are large blocks of marl lying on the ground, which have fallen from the roof and are impregnated with Epsom salt. From the roof itself hangs a layer of the same mass, at least seven feet thick, covered all over with a white crust of Epsom salt. One might suppose that this was nothing but efflorescence, yet the fragments on the ground show that the sulphate impregnates the whole mass. The roof at this place is in a very dangerous state. The same sulphate appears in smaller quantities in the other mines. It is embedded with those thin seams of marl which sometimes separate the good salt layers from each other, and it shows itself often as efflorescence. Amongst other places, I found this efflorescence upon marl in Thomson's drift. From it I produced a sample of crystallized Epsom salt by boiling.

Presence of Epsom salt in this mine.

SOOJEWAL MINE.

43. The Soojewal mine is worked on the south side of the hill in a salt seam of 50 feet thickness, which slopes gently to the centre of the hill in the direction north-north-west. It is of an oval form, with its longer axis lying west-south-west to east-north-east. It is bordered on the east by very extensive old workings, part of which belong to the old Chingwalla mine. Northwards the boundary of the mine is limited by the depth to which it may be carried down the sloping salt seam. The west extremity is all fresh working field in which work is chiefly going on now. To the south of the mine and in the

Description of

same salt stratum lies the Mukhad mine. This latter is not connected with Soojewal mine, but its lower workings will soon be met with when the Soojewal workings are carried further to the south and south-west. Soojewal has the following three entrances :—

Entrances into Soojewal.

44. The large entrance tunnel, called Purdon's Tunnel; the drift leading to the south-western chamber called Matthew's Drift; and the old Sikh entrance, leading from a point above Purdon's Tunnel to the old working, and from thence to the present workings of Soojewal mine. The old Sikh entrance is never used for communication, but affords some ventilation, being situated higher up than the two other entrances. The large tunnel is set in very strong masonry all the way along. It is 248 feet long in the slope, 9 feet wide, and 9·5 feet high. Through it the chief transport of salt takes place. The smaller Matthew's Drift, which is not faced with masonry, merely leads to a new chamber in the southern corner of the mine, and the salt from this chamber and some adjoining places is brought out through this drift. It has already been mentioned that the Soojewal mine is connected with the Phurwalla mine by a drainage drift 300 feet in length. The water is led from the middle of the mine to the beginning of the drift in the western corner of the mine by an open cutting, which is marked on the plan. Formerly the brine-pool of Soojewal extended much beyond its present limit, which is shown on the map, and by further cutting down the open ditch which leads to the water drift all the water will ultimately be brought out.

Further description of the interior of Soojewal.

45. As will be seen on the plan, the mine is provided with pillars, which vary very much in distance, form, and size. One part, the old Sikh chamber, opposite Purdon's Tunnel, is without any pillars at all, and subject to dangerous falls like the other old workings. No arrangements have yet been made to open the salt-field from behind. The whole working has therefore to be carried out along the outlines as far as there are undisturbed salt-fields. The mine, consequently, is extending concentrically. Every season adds a new belt to it. The extension takes place only on the northern and western sides, because on the east and most of the southern borders the field has been all worked out. On the extending outline, we have the following workings, going from east to west: First, in the north-east, the deep workings of Soojewal, which are 300 feet long and have been driven downwards, because the salt seam slopes down very rapidly at this place. South of the deep workings the seam is for some extent entirely horizontal, whence there is a sudden descent into the deep workings at an angle of about sixty degrees from the horizontal. Next to these workings, the outline goes for a length of 400 feet over those parts of the mine which have been entirely submerged. The working of these will recommence after the water has all been taken out by the deepening of the water-drain. But there is little chance of working these places to any extent, because the salt seam slopes downwards and the water will refill all the workings immediately they are carried below the present level. Unfortunately the water-drift to Phurwalla was only made to get over the calamity temporarily without any regard to the future. As constructed, it cannot convey the water from a deeper level, although the Phurwalla mine lies fully 100 feet below the endangered places in the Soojewalla mine. Next to these flooded workings, we come to a large chamber from which the water-drift starts to Phurwalla.

From this water-drift chamber, we find the shortest line to Buggy, and therefore it is proposed to start the new connection drift between the Soojewal and Buggy mines there. Proceeding from this chamber up the salt seam, we come to the chamber near the Matthew's Drift, between which and the water-drift chamber is a massive salt-field of considerable area, which is worked at from these chambers and from the north-east. At the west end of Matthew's drift chamber a small drift has been started (Map III). This is only 20 feet long on the map, but has, since the survey, been lengthened to 70 feet. Another drift, 30 feet long, has been cut, in addition to the above, in the elongation of the chamber to the south-west. A similar drift, 100 feet long, has been made in the Buggy mine, through the salt. The purpose of these drifts in both mines is to create working space, of which there is always great want. It is clear that the only way to create space is to advance drifts, by which we get fresh points for attacking the salt-field and fresh working space. So far the cutting of these then is quite right, but they are not sufficient. By only making such drifts, from time to time, as occasion dictates, we add not much to the working space, but considerably to the irregularity of the mine. What is really required is a complete system of drifts, arranged according to one general plan, and made to open out the whole working field at once. There ought to be no want of working space. Having calculated the number of miners required to work the mine, we can make space for them whatever the number be. The carriage of salt from Soojewal is most difficult. The distance from some working places to the salt depôt outside of the mine, to which the salt has to be carried, is more than a thousand feet, and the tunnel mouth is fully 180 feet higher than the deep workings. Only a limited number of miners enjoy the benefit of using Matthew's Drift, through which the salt issues from the adjoining chambers at half the above stated distance.

Proposals for future drifts.

46. On an average, the distance over which the salt has to be carried is not quite so great as in the Buggy mine, the average distance there being quite one thousand feet, but there is less elevation in this mine. The out-turn of salt by each carrier is therefore equal in both mines, if we take the average in each (see statistics, para. 54). The carriers bring nearly all the salt out on their heads in baskets, and the rest in large lumps carried on their backs.

Out-turn of Salt equal in the Buggy and Soojewal mines.

47. Regarding the two new drifts in the salt from Matthew's drift chamber, it has to be mentioned that originally one drift only 100 feet long was intended to be made similar to that in Buggy. The first started drift, however, after a horizontal elongation of 70 feet, ran into salt marl and was stopped, and the remaining 30 feet were finished by a new drift worked in the direction of the strike. The first drift ran into that salt marl which overlies the Soojewal salt seam, and the marl made its appearance exactly where it was to be expected, according to the west-north-west direction of the drift and the north-north-west slope of the seam, *viz.*, on the northern corner of the drift end.

New drifts.

BUGGY SALT MINE.

48. Plan III is a ground plan of Buggy mine, a vertical section across the strata and a vertical section parallel to the strike of the strata. The mine is situated inside the north-western slope of the hill, whilst the other mines are all on the southern or south-eastern side. The whole appearance of this mine differs from that of the others owing to the salt seams sloping so much

Description of

downwards that the vertical extension of the workings of each seam exceeds its width. This mine advances only in the direction of the strike of the strata, and has its greatest dimensions in this direction. It has three seams of pure workable salt, which we call the upper, middle, and lower Buggy seams. It has at its south-west end an old Sikh chamber, the largest of all the chambers in the Mayo Salt Mines. This chamber extends over both the middle and upper salt seam of Buggy, and the marl seam between is taken out. The mine extends from this chamber forward towards the north-east by means of a number of other chambers, all of which travel with the strike of the strata. There are three upper and three lower chambers, *viz.*, an upper and a lower in each seam. In the middle seam there is besides the large lower chamber a small extra chamber; the large chamber only is, however, worked forward, the small chamber being intimately connected with it. There is no real marl seam separating both chambers, and the wall of salt between them is excavated, leaving only a few small pillars between. We therefore really only count one lower chamber in the middle seam, and have the following six chambers to count in the Buggy mine :—

Three seams of workable salt in the Buggy Mine.

Chambers in this mine.

Described.

Upper Chamber,	Upper Seam,	Buggy Mine.
Lower Chamber,	Upper Seam,	Ditto.
Upper Chamber,	Middle Seam,	Ditto.
Lower Chamber,	Middle Seam,	Ditto.
Upper Chamber,	Lower Seam,	Ditto.
Lower Chamber,	Lower Seam,	Ditto.

49. Most of these chambers have to be divided again into two workings, an upper working and a lower working. As we have two chambers in each seam above each other, so we have, with only one exception, in all seams four tiers of workings. We may therefore divide the mine into four separate working stories. This division has been adopted for the new workings, as we shall see afterwards. We start counting the stories from below, so that Nos. I and II belong to the lower chambers, and III and IV to the next story upwards, and so on. I have written the Nos. of the stories on the vertical sections of the Mine Map III. The upper story No. II is always driven in advance of No. I. Story No. I is the deep working or "*Pur*" of story No. II. The floor of No. II is worked in advance through the unbroken mass of salt rock, and this part of the working is called the "Kuttee," the roof of which is raised by working upwards. This work is called "Chuth," and is done by miners sitting upon tripods. Story No. IV is also worked in advance of No. III and rightly so, because the upper workings ought always to extend beyond the lower ones. The rule is, however, not followed as regards the upper and lower chamber in the middle seam, the lower chamber in which is worked far ahead of the upper one, so that story No. II of the lower chamber is fully one hundred feet beyond the fourth story of the upper chamber. Between both chambers, stories II and III, a roof is left, which is supported by the pillars of the lower chamber, and upon it those of the upper chamber rest. It so happened that two immense pillars of the upper chamber were resting on the thin roof without having corresponding pillars in the lower chamber, vertically below them, as supports. The removal of these very dangerous pillars had already commenced, when suddenly, on Sunday (the 5th June 1870), one of them broke through, carrying with it a large part of

Division of workings and stories described.

Present pillars in this mine very dangerous.

the roof. The quantity of fallen salt and marl may be estimated at half a lakh of maunds. The fallen pillar was that which is represented on Map No. III in the vertical section parallel to the strike. The other pillar which had not fallen and the dangerous part of the roof have since been removed. There is, however, no safety as long as such a roof is left at all. The distance from the floor of the first story to the roof of the fourth, *viz.*, the whole height of the mine, is, in the middle seam, more than 130 feet. The pillars are thus 130 feet high, and they are cut out of the nearly vertical salt seam, with great liability to fracture along the salt layers. If there were no middle roof at all, and the pillars went clean up 130 feet high, it would be neither more nor less dangerous than to have two of half the height standing vertically above each other with a thin middle roof between them. This middle roof is therefore of no use, nor are single pillars good. The seam, although very upright, does not lie vertically, and this makes the single vertical pillars still more unfit for supporting the roof of this mine. We shall be obliged to relinquish this system, and the only alternative in this case is to leave, instead of the single prismatic pillars, complete walls of rock salt across the strata. This method is intended in the future working plan. In story No. II, middle seam, a horizontal drift, 70 feet long, 6 feet wide, and 7 feet high, has been worked into the salt. It extends 100 feet, and was designed for the purpose of making workings behind the present boundary of the chambers. If these are started, they will most seriously injure the future working plan and lead to a further progress of the lower workings beyond the upper ones, which is against the rules. I rather wish to make use of this drift for the benefit of the future workings. I should elongate it still more and let it slope upwards in such a direction as to reach the future parallel gallery No. 4. This parallel gallery could then at once be driven far in advance of the old workings. The first story of the upper seam, as well as the south-western part of the deep workings in the middle seam, are flooded with water. A Persian water-wheel was constructed to lift the water sufficiently high to allow it to flow out through Thomson's Drift, but this wheel was smashed by the great fall of salt on the 5th June 1870. The upper chamber in the lower seam has only one story, which is to be counted as No. III. The lower chamber has two stories. At the south-western end the two chambers unite into one, without an intervening roof between stories II and III, just like the large Sikh chamber in the middle and upper seam. A new upper chamber has also been commenced in the lower seam, in advance of the old one. This was started by driving a drift from the middle seam through the 25 feet marl seam. It is shown in the ground plan of the lower workings, and will be recognised by its perfectly circular form. All the other chambers in Buggy, with this exception, are worked and advanced only at their north-east end. This one circular chamber enables us to attack the lower salt seam at three places instead of one. It is an illustration on a small scale of that system which is proposed in the new working plan, *viz.*, to go forward by means of a few drifts over a large area of the salt-field, and then attack it simultaneously at several points. At some points in the Buggy mine, for example, in the low workings of the lower seam, a great number of miners are all placed on the same floor and are working downwards simultaneously. This method of working must have been introduced in consequence of the want of space and is not good.

Proposed future plan of working this mine.

MINES, KHEWRAH SALT RANGE.

We ought not to work down a whole level at the same time, but work in steps, following each other. The miners ought to be placed on the top of each step and allowed to blast the salt down with a free space before them. As they blast away, the steps advance and always retain the same form with relation to each other. There have been two drifts made in Buggy to examine the strata above and below the salt seams. One drift, which is closed since the great fall of salt above alluded to, goes from the upper seam into the marl, 40 feet long. It shows salt marl with a few salt seams, not above 2 feet thick each. Another drift from the upper chamber of the lower Buggy seam into the lower strata is 20 feet long horizontally, and shows salt marl.

50. The Buggy Mine has, like Soojewal, three entrances. There is a long new drift by Thomson, an old Sikh drift which is the entrance at present used, and a ventilating drift by Purdon. *Entrances to the Buggy mine enumerated,*

51. This latter is set in timber, and is 260 feet long. Its outside mouth is 130 feet higher than that of Thomson's drift. The entrance drift at present in use is a miserable, tortuous, undulating passage, the mouth of which at the salt depôt has a level of 145·3 feet, while it crosses Thomson's drift at a level of 102·0 feet. Thomson's drift has a total length of 740 feet. It stands, for its greater length, in loose rock, and a part of it 90 feet long has fallen in. *and described.*

52. A temporary parallel drift has been cut to avoid this place. Thomson's drift is ten feet high and nine feet wide. It serves no other purpose now than for ventilation. It cannot drain the deep workings of the mine, being much too high. No transport of salt takes place through it except at one small part of it, and all the salt is taken to the depôt through the old Sikh drift. Thomson's drift was intended for a tramway by which to bring the salt directly from the Buggy Mine to the Mundi. The reason why this tramway was never laid and used may have been due to the necessity of an entire change in the system of storing the salt and paying the miners which would have been involved by the introduction of tramway carriage, and which must now be carried out with the new working plan. Each miner now brings his salt to the depôt and makes a separate heap of it there. Each heap is separately sold to the merchants, and the miner receives his wages according to the number of maunds which his heap turns out in the merchant's bags. Such separation of each miner's salt cannot co-exist with the carriage of the salt on the tramway. The salt which is carried out on the tramway must be Government property, and we must introduce a system which will enable us to take charge of the salt of each miner before it is loaded into the wagons. There is of course no idea of weighing the salt in the mine, and we must naturally fall back on that method in use in so many mines, that of paying the miner by cubical measurement of the excavation which he has made. We can associate small parties of men together, four to six will be sufficient, and let them work on common account in one Kuttee, or in one step of the Pur of one and the same gallery, and measure their work monthly. All the salt of the Buggy Mine is carried out through the old Sikh entrance, as mentioned before. Into this entrance it is brought by two different ways—one part is brought through the lower chamber of the lower seam workings, and the other part comes from the middle seam workings, going by the drift which connects the middle seam with Thomson's drift, and through part of the *Thomson's drift described.* *Reason why projected tramway was never laid down.* *Present mode of estimating wages of miners must cease.*

Thomson's drift itself. The number of carriers who have to pass through the old Sikh entrance is very great. All the carriage is concentrated at this passage, whilst in Soojewal two passages are used, one of them very broad. The number of journeys to and fro which the carriers make daily is twenty to the more distant points in both mines. From near points they make twenty-five and even thirty turns in a day, and they are eight hours at work. The adults bring out 30 seers of salt at each turn; sometimes they also carry large pieces, weighing over a maund.

Mode in which excavation is now conducted.

53. As regards the miners, we have seen that they work in three different ways in Buggy. First they work forward from a certain floor into the rock salt. This is called the "Kuttee" and is the most troublesome. It is nearly as hard as driving drifts, and the miners have at first a good deal of pick-work before they can blast. As they go forward with the "Kuttee," they gradually work the roof down, which is called "Chuth." For this purpose they sit upon tripods, some of which are 25 feet high. When they have advanced with the "Kuttee" and "Chuth," they begin to work the "Pur" from behind downwards. This Pur ought to be very easy work, but it is not, because from want of space, it cannot be carried on in regular and advancing steps. Instead of that the miners work the "Pur" down all at once over certain areas, which are marked out to them. This, as already mentioned, is the case in the low workings of the lower seam in Buggy, and the deep workings of Soojewal are another example. About 80 men are there working down the bottom of a chamber which is 300 feet long and 40 feet wide. These deep workings are the only "Pur" work in the Soojewal Mine. In all other working parts of this mine, the "Kuttee" is driven forwards on the floor of the salt seam, and the roof is worked upwards as "Chuth." This is the very contrary of what I propose in the new working plan. I want to work the Kuttee on the roof of the salt seam, and the remaining salt will all be worked down to the bottom of the salt seam as "Pur." This same method I wish to employ in this Mine, by working a Kuttee on the top of each chamber and getting the remaining salt out from below by steps.

Subjoined table gives details of mining operations.

54. The following table gives the number of miners and carriers at work in three previous years and the quantity of salt which was taken out from both mines:—

Mine.	Year.	Miners.	Carriers.		Salt.
			Adults.	Children.	
					Mds.
Soojewal	1867 ...	189	237	192	5,76,061
	1868 ...	193	228	106	5,22,005
	1869 ...	186	223	211	4,47,492
Average ...	...	189	229	170	5,15,186
Buggy	1867 ...	217	238	167	5,02,346
	1868 ...	189	209	103	4,73,168
	1869 ...	197	214	232	5,47,063
Average ...	...	201	220	167	5,07,526
Total of Averages ...	...	390	449	337	10,22,712

MINES, KHEWRAH SALT RANGE.

55. The production of salt, number of carriers, and number of miners, are about the same in both mines. Work ceases during the rainy season, and also when the stock of salt becomes too large. We may calculate upon eight working months in the year; and during these months the miners and carriers only work four days in the week. They keep away on Sundays, Tuesdays, and Fridays. This leaves only 138 working days in the year. Three hundred and ninety miners produced on the average of three years in 138 days 10,22,712 maunds of salt. In one day they produced 7,411 maunds and each miner 19 maunds daily. *Further statistics connected with excavation of salt.*

56. We, however, estimate the work of a man at 20 maunds daily, because the above-mentioned number of miners are not always present. The carriage is estimated at the rate of about fifteen maunds a day by an adult and five maunds by a child. The miners receive 4 Rupees for every 100 maunds. Of this 1 Rupee is considered as pay for carriage, of which no separate account is kept. The miners have to pay 1 anna 10 pies per hundred maunds to the Dhurwais or weighmen. *Miner's earnings.*

57. A miner uses one-fifth of a seer of powder a day, at five seers per Rupee, and one-eighth of a seer of oil, at three seers per Rupee. The value of the former is 0·64 annas, that of the latter 0·67 annas. They also pay about 1 Rupee annually for their tools. Taking all this into consideration, the miner's pay is as follows, excluding carriage— *and expenses.*

	Annas.	Percentage.
Daily pay for 20 maunds of salt, at Rs. 3 per 100 maunds	9·60	100·00
Dhurwais' fees	0·37	3·82
$\frac{1}{5}$th seer of powder	0·64	6·67
$\frac{1}{8}$th seer of oil	0·67	6·94
Tools per 20 maunds of salt	0·10	1·04
NET BALANCE OF WAGES ...	7·82	81·53

Carriage.—The earnings of carriers are as follows:— *Carriers' earnings and expenses.*

1 Adult 15 maunds of salt daily at Re. 1 per cent. ... 2·40 annas.
1 Child 5 do. do. .. 0·80 „

From this, about $\frac{1}{2}$ an anna must be deducted from the earnings of the adults for oil, which leaves the daily earnings of an adult carrier at 1·90 annas and of a child at 0·80 annas. The cost for production of 100 maunds of salt is now 4 Rupees, and this amount is divided into the following charges:— *Entire cost of delivering 100 maunds of salt.*

Net wages of the miners ...	2 Rupees 7·14 annas	61·16	per cent.
Pay to the Dhurwais ...	1·83 „	2·86	„
Miner's powder 1 seer ...	3·20 „	5·00	„
Miner's oil $\frac{5}{8}$ seer ...	3·33 „	5·20	„
Miner's tools ...	0·50 „	0·78	„
Net wages of the carriers ...	13·00 „	20·31	„
Carrier's oil ...	3·00 „	4·69	„
TOTAL Rs. ...	40·00	100·00	per cent.

Other expenses, carriage, fees, &c.

Besides the above, other expenses are borne by the salt, as follows:—

Carriage from Buggy depôt to the Mundi, 8 annas, and from Soojewal depôt to the Mundi, 1 Rupee, for every 100 maunds of salt.

Carriage from depôts at the mines to Mundi	...	12·00 annas.
Carriage of empty bags to the depôts	...	1·13 „
Paid by the merchants to the Dhurwais	...	0·58 „
Paid by the merchants to the Lumberdars	...	0·58 „
Paid by Government to the Lumberdars	...	0·13 „
TOTAL EXPENSE FOR CARRIAGE AND FEES	...	14·42 annas.

Weighing Expenses.

Weighing expenses incurred by the large merchants per 100 maunds—

Weighment of empty and full bags	...	12·92	annas.
Sewing up the bags ...	...	3·00	„
String	...	1·50	„
TOTAL WEIGHING EXPENSES	...	Re. 1 1·42	annas.

Total cost of production weighment and delivery.

The whole expenses therefore are—

Salt-excavation ...	...	Rs. 4 0	annas.
Mundi carriage and fees		... 14·42	„
Salt weighing	...	Re. 1 1·42	„
TOTAL	...	Rs. 5 15·84	annas per 100 mds.

IV.—Description of the future working plan (Map No. III).

FUTURE WORKING PLAN OF THE MINES.

Wire Tramway,

58. As a matter of the greatest importance for the future working of the Mayo Salt Mines, it must first be mentioned that there is a project of providing the mines with a wire tramway (Hodgson's patent). This project in the hands of Lieutenant de Wolski, R. E., and favored by the Commissioner of Inland Customs, will doubtless be carried out. The wire tramway will convey the salt from the mines to Pind-Dadun Khan on the River Jhelum, and probably also across the river to Miani. The undertaking will facilitate the transport of the salt so much that its price at the place of consumption will be considerably lowered, and the demand for the produce of the Mayo Salt Mines increased in the same proportion. The tramway will enter the mines themselves and take the salt directly out of them, so that all carriage to depôts outside of the mines is dispensed with and the salt will only have to be carried within the mines to the loading stations of the tramway, which will be placed about the centre of the workings. It will pass through Thomson's Tunnel and across the large Sikh chamber into the new chamber, Story No. II, in the middle seam of Buggy. The loading station for the Buggy Mine will be in this chamber. From it a connection drift will be made to the water drift chamber in the Soojewal Mine to bring the salt out through it from this latter. It is intended to lead a branch of the wire tramway through this connection drift into Soojewal and to have a second loading station constructed there in the water drift chamber.

A great improvement, supplying a real deficiency.

59. The wire tramway by entering the mines is not only a great improvement, but also supplies a real deficiency. The situation of the mines is most favourable as regards carriage, because they are all inside the hill *above* the level of the gorge into which the salt has to be brought. Yet carriage has been hitherto most difficult. The miners found, in former years,

the shortest way to the salt treasures by going in a slope downwards to the interior of the hill starting from higher points outside. They thereby saved the cutting of a much longer distance through the base of the hill. These old miner's passages although in an improved form have been in use up to this time. The salt is brought from the workings of the mines through them and is stored outside on the slope of the hill. From these store places or depôts a second transport has to take place down into the Khewrah Gorge to the weighing house. The latter transport, which is nearly as expensive as the former, is done by cattle. The Buggy Depôt is not very far from the weighing house, but the Soojewal Depôt lies at a distance of more than half a mile. It is a pity to see so much labor wastefully employed taking salt up to a great height, merely to bring it down again.

Driving of Thomson's Tunnel, the first step towards improvement.

60. The driving of Thomson's Tunnel by the Public Works Department forms the first step towards improvement of the Buggy Mine. A glance at the map shows at once that after the establishment of a proper road out of the Buggy Mine, the best road for the Soojewal salt naturally leads through it. This fact is fully acknowledged by the adoption of this road for the wire tramway.

The introduction of the wire tramway will cause the abolition of the depôts at the mines.

61. The introduction of the wire tramway will do away with the depôts outside of both mines. The splendid Purdon's Tunnel in Soojewal and Matthews' Drift will then merely serve for ventilation. This will, however, be rendered excellent. A strong current of air will rush down through the entrances of the Soojewal Mine, pass through the connection-drift into Buggy, and out through Thomson's Drift. Besides this the connection-drift will be very useful for the supervision of the mines and also in regard to the safety of the miners. If a slip of the hill should shut up all the entrances of either of the mines, six hundred lives might be lost for want of this connection-drift.

Feasibility of a wagon tramway was first considered.

62. Before the project of the wire tramway was resolved upon, I had proposed to take the salt out of the mines and down to the weighing house by means of a wagon tramway with iron rails as shown on Map No. III.

Its proposed course.

63. The rails were to enter the Buggy Salt Mine by the deepened open Thomson's cutting and by a new low level drift to the floor of the deep workings in the lower Buggy seam. From there we would have made two branches, one to the left for the Buggy Mine going along the great middle seam, and one for Soojewal going over to the seam of this mine by a connection-drift. This latter as given on the drawing would have been much deeper and in a different position from that which will now be made for the wire tramway. Thomson's Drift would not have been fit for the original project, because of its steep ascent. The wire tramway is much more independent of differences of level, and there is no objection to bring it at once through Thomson's Tunnel instead of waiting for the construction of another entrance drift.

Wire tramway more suitable than a railway.

Advantages attending upon low-level drifts.

64. A low level entrance drift and low level connection-drift would have the advantage of draining both mines entirely so as to allow of their being worked down everywhere to the proper depth without the chance of their being filled with water. There is however not much water in the mines, and the whole quantity is yet so small that in most places workings can be carried down far below the level of the lowest outlets, which are now Thomson's Tunnel in the Buggy Mine and the Phurwalla water drift in Soojewal Mine.

Construction of a deep water-drift in the Buggy mine may now be postponed.

65. On this account the driving of a deep water-drift from the Buggy mine can for the present be postponed. Still it will have to be made as soon as the salt-beds are exhausted in the higher levels, should meanwhile no new salt-bed be found above the Buggy Mine or between the Buggy and Soojewal Mines. The working of the Phurwalla Mine cannot be resumed unless a low level drift is constructed. It may be that most part of a low level drift from the Buggy low seam deep workings to the open Thomson's cutting will be in salt, and in this case its construction and maintenance would be very cheap. I should therefore, as a preliminary measure, at once begin to work a gallery from the floor of the deep workings towards the outside of the mine. This will show how far the salt really extends in that direction and will facilitate future undertakings without incurring expense.

Carriage of salt from the points of excavation to the loading stations of the tramway considered.

66. As regards carriage, a great part of the salt will have to be carried upwards on its way from the deep workings of both mines to the loading stations of the wire-tramway. This is again contrary to the principle that no salt ought to be lifted to a higher point inside of the mines, and that the tramway ought to limit the depth of the mines. The loading stations will, however, not be permanently constructed, but will be shifted as the workings advance. We could in future place them deeper because the wire tramway allows alterations in level which no other mode of communication would. But as stated before it is not known yet whether we shall after all need to go so deep. If rich salt strata are met with in higher levels, it will be advisable to place the new workings higher. If this is the case we abandon the deep eastern parts of the Soojewal Mine altogether, and the Phurwalla Mine will be permanently closed.

Phurwalla seam excluded from the plan.

67. The working plan refers only to the continuation of the workings of Soojewal and Buggy. The Phurwalla salt seam is not included in it, because that seam will only be taken up when all the easier resources were exhausted.

68. The future workings of Soojewal Salt Mine.

Soojewal Mine.
Future workings.

The level down to which the sloping Soojewal salt seam can be worked after being effectually drained is much deeper than the present limit of the mine. Consequently a wide field of undisturbed rock salt may be opened out for exploration along the whole northern side of the mine. Higher up towards the south-west there is a large part of the Soojewal salt seam yet undisturbed, and the fresh field on this side extends from the Mukhad mine on the south-east to the deep level boundary of the new workings on the north-west. The south-eastern boundary of the Soojewal Mine consists entirely of old exhausted workings.

69. The future workings of Buggy.

Buggy Mine.
Future workings.

The future workings of this Mine are not so much dependant upon drainage as those of Soojewal, because drainage already exists to a considerable depth through Thomson's Tunnel, and because there are, at least up to the present, no limits to the salt layers on the upper boundary of the mine. All workings might, if necessary, be carried up to a higher level. The height of the excavation which we propose to work out of the Buggy seams is fixed at 127 feet. This is the height of the present workings. The width of the workings will also remain the same, because the same salt seams will be worked out. The future Buggy Mine will therefore be an elongation of the present

mine, though probably not quite in a straight line. It is expected to take a slight curve to the south on its north-eastern course. At this conclusion we arrive from the form of the hill, the geological situation in general, and the appearance of the Soojewal salt seam. This latter notoriously bends round with its convex side towards Buggy, and the Buggy salt seam is most probably parallel to it. As regards those parts of the Buggy salt seam which remain on the top of the present and of the proposed workings, we do not know their extent although this may be very considerable; and it would be very desirable to know what resources are left to us there.

Rules for future working.

70. The rules upon which the future working plan is based can be detailed as follows:—

Drainage.

1. *Drainage.*—The mines are to be kept free from water by self-acting drainage. The working out of the large seams of good salt is therefore not to be carried down further than the level of the adjoining Khewrah Gorge.

Carriage.

2. *Carriage.*—Not only on account of the water shall we have to stop the working at a certain depth, but also on account of the carriage of the salt which ought to be level or downward inside of the mines, not upwards.

Galleries and pillars.

3. *Galleries and pillars.*—All galleries should be driven either parallel to the strata in the strike or across the strata in the fall. Consequently the pillars should be rectangular with sides parallel to the strike and to the fall. For the sake of safety the pillars should have their greatest extension in the direction of the fall, and should also in the upright wide seam extend over the whole width of the seam.

Method of excavation.

4. *Method of excavation.*—The extraction of the salt should always be carried on so that the higher parts are excavated ahead of the lower, and that the lower parts are worked out in regularly advancing steps. There should also be certain drifts continually driven ahead of the workings for the purpose of attacking the salt field simultaneously from different sides and for the sake of creating ample working space.

1. *First rule.—Drainage.*

1st Rule.—Drainage.

71. To secure complete self-acting drainage of the mines a drift would have to be made as low as possible, to drain the water out of the deepest parts of the mines into the Khewrah Gorge. The Buggy Mine is now drained solely by Thomson's Tunnel which is higher than the present floor of the mine. There is, however, so very little water in this mine that we can in many places go down considerably below the level of Thomson's Tunnel without being hindered by water at all. The deep workings of Buggy are kept separate from each other, so that whilst one part may be under water, the other remains quite safe. This example we should follow in the future workings, whenever we went below the level of the deepest draining drift. The Buggy Mine can be drained at a level of 120 feet, and the Soojewal Mine, which is now only drained to 180 feet by the Phurwalla water-drift, may be drained fully 60 feet deeper by a horizontal connection-drift. This depth will be sufficient if we have not very much water or if there is so much salt met with in higher levels in still unknown strata that we are not bound to take the salt out from lower levels. When we have a considerable inflow of water, and no new salt seams are disclosed by the connection-drift, nor the seams prove to extend far above the Buggy Mine, we shall have to take as much salt out from below as we can,

and make a lower connection-drift, and a low level entrance-drift into Buggy Mine as proposed before.

2. *Second rule.—Carriage.*

2nd Rule.—Carriage.

72. So long as we only seek to explore those strata in the Mayo hill which lie higher than the ultimate point of delivery of the salt outside of the hill, we ought to make such arrangements as to require no lifting of the salt inside of the mines. All the salt ought to be transported horizontally or downwards to the tramway. This involves again the condition that the tramway should be in the lowest part of the mine. Now the loading stations of the wire tramway will not be in the lowest part of the mines, but above all the deep workings. For this reason we will not be able to at once entirely comply with the above rule. We can only follow it by chiefly working those parts of the mines now, which lie level with or above the loading stations. The remaining salt may be worked out afterwards when the loading stations are lowered. These latter are not permanent but are to be shifted as the workings advance. If we find much salt at a higher level and the loading stations are not required to be lowered, nor deep water drifts to be made, we may abandon the lower workings altogether. We may bring the whole of the Buggy Mine to a higher level, and on the other hand consider the eastern part of Soojewal Mine to be for the time worked out as soon as an inconvenient depth is reached. In regard to this rule it is of great importance to examine the upper parts of the Buggy salt seams. It should be ascertained by a drift whether these seams extend so far above the present roof that we could work a new mine in the same seams above the old Buggy Mine.

3. *Third rule.—Galleries and pillars.*

3rd Rule.—Galleries and pillars.

73. All galleries should be driven parallel to the strata in the strike and across the strata in the fall. Accordingly the pillars should be of rectangular form and have their sides parallel to the strike and parallel to the fall. We should have the following three kinds of pillars in the future workings :—

Three kinds of pillars in future workings :—1st.—

1. In the sloping salt seam of Soojewal all pillars should be rectangular and all of the same dimensions. The height from the bottom to the top of the salt seam is equal to 40 feet, the breadth in the direction parallel to the strike equal to 20 feet, and the length in the direction of the fall of the strata equal to 40 feet. The longer axis is placed in the direction of the fall of the strata, to prevent the pillars from cracking along the separate layers of salt.

2nd.—

2. In the big middle seam of Buggy, pillars of twenty feet thickness forming entire walls across the nearly vertical seam and extending from the floor to the roof of the mine. The height of these pillars will be equal to the mine's height, *viz.*, 127 feet, and the length measured horizontally will be just about the same, *viz.*, 127 feet.

3rd.—

3. In the two smaller seams of Buggy, the upper Buggy seam and the lower Buggy seam, we shall have no vertical pillars at all, but roofs instead between the upper and the lower chambers. We cannot help leaving these roofs here, the seams being are too narrow and too upright for any other plan. All the pillars for the future workings are marked out on Map No. III.

marl seam into the upper and lower seams. From these small drifts, we can work the upper and lower parallel galleries by which we intend to open out those seams. At the same time, we have the opportunity of leaving also in these salt seams at considerable distances apart, say, every 180 feet, cross-pillars corresponding with those of the middle seam. The leaving of a few cross-pillars in the side seams will still more contribute to the safety of the mine. As regards Soojewal, two small drifts have already been made in the Mathews's chamber as described above. These will come into use for commencing such galleries as are in accordance with the adopted working plan. Another drift should, I suggest, at once be made parallel to the strata and starting from the water-drift chamber,—the site of the new loading station. This drift going from north-east to south-west will open out the salt field of Soojewal which still exists above the level of the loading station, and the extensive working of which will therefore be of the greatest importance. Another drift parallel to the strata may later be commenced at a deeper level, starting either from the now proposed connection-drift or from a still lower point.

Pay of the miners by measurement.

78. With the introduction of the wire tramway the separation of each miner's salt will become an impossibility. We shall therefore have to pay them by measuring the excavations which they make into the salt. The galleries themselves will form the register of what the miners have done and afford a guarantee for just payment. One cubic foot of compact rock salt weighs one and a half maunds. The miners may be paid per cubic foot excavated in the salt rock as much as hitherto they have received for one maund of salt. At this rate, I think, we would justly make up for all losses which accrue from the time of excavation, until the salt passes into the merchant's bag. The principal loss is caused by small salt, and also in a minor degree by bad salt. The miner's wages for every hundred maunds delivered at the salt depôts outside of each mine, have hitherto been equal to 4 rupees, minus 1 anna 10 pies dhurwais' fees, and the same amount would have to be paid now for every hundred cubic feet of excavation. It is, however, most desirable to pay a higher price for kuttee than for Pur excavation. The proportion of kuttee to Pur will be 1 to 5, and on that proportion we shall have an average cost near enough to the old rate of 3 rupees, 14 annas, and 2 pies, if we pay for the kuttee, at the rate of 4 rupees, 11 annas, per hundred cubic feet, and for Pur at 3 rupees, 11 annas per ditto, including carriage in both cases.

Pay of the miners by measurement necessitated by the introduction of the wire tramway.

79. The price for the same number of cubic feet, after the establishment of the tramway, must be at least 8 annas less on account of the much shorter distance of the working places from the terminus of the tramway. The miners would have to deposit the salt in heaps along the tramway and receive for every 100

cubic feet of kuttee	Average	4 Rs.	5 As.
And per 100 cubic feet of Pur	Average	3 Rs.	5 As.
Average cost of 100 cubic feet		3 Rs.	8 As.

Price per 100 cubic feet estimated.

80. To compensate for the lower price, the miners would save the amount of 2 annas 2 pie, per 100 maunds, which they hitherto paid to the dhurwais or weighmen. The system of paying the miners by weight forms a guarantee against the waste of salt

Gain to Miners by this new system.

Security against waste imperilled by new system of payment by measurement,

This guarantee is lost when the miners are paid by measurement. It, however, cannot be much to the interest of the miners to make small salt, and besides that, good supervision should secure us against such loss. The supervision of the mines will be very much facilitated by the completion of the proposed connection-drift. The work of their whole body can be checked by the annual balance of the salt. If all surplus above the demanded out-turn were divided amongst the miners, they would mutually endeavour to hinder the waste of salt, and facilitate successful supervision. The system of paying the miners by measurement is accompanied by the great advantage that salt may be stored to any amount in the mines themselves, where it is obviously much safer and not exposed to rain as it is now in the depôts.

but counterbalanced by the advantage of storage in the mines.

81. There is one method of excavation in salt mines, which requires less labour and yields a less percentage of small salt than any other. That is the cutting of the rock salt by water. This method is used in Germany and France, but not in England. It proves most advantageous in mines which have very pure salt, and in this respect no better opportunity could be found than in the Mayo Salt Mines. The method requires a copious, and easily available supply of water, or at least weak brine, plenty of piping, and extensive preparation of "kuttee" workings. When a mine is fully prepared by kuttee workings, the piping is laid in these, and the remaining salt, below the Pur, is divided by water streams, into as many partitions as one may choose. The salt blocks, which are set free on three sides, require a very small amount of blasting to become separated. Although the time has not yet come for the introduction of this new system, it may be kept in view for a future occasion. There is one thing, however, to be remembered, the continental mines have the advantage of using the resulting saturated brine for conversion into salt, whilst here on the salt range, the brine would be only a nuisance.

Another method of excavation described.

Quantity of Salt which the new workings will yield.

Buggy Mine.

82. The distance to which the Buggy Salt Mine will be driven forward, in completing the future workings, we take to be 900 feet. We expect that the seam will extend north-east, in a curve parallel to that formed by the north-eastern boundary of the Soojewal Mine. Even after an elongation of 900 feet, the workings of Buggy would not nearly reach to the north-east end of Soojewal mine, and there is not much fear, that the Buggy salt seams would be interrupted before the distance of 900 feet is reached. We see from Map II, that the summit of the hill extends just in the same direction as Buggy, and beyond the required distance, before it turns eastwards and before the strata commence to dip to the north-east. Inside of the boundary of 900 feet, no material change of the strike, or fall of the strata, need therefore be expected. The working field of the new proposed Buggy works is now 900 feet long, 125 feet high, and 160 feet wide, which gives a solid area of 180 lakhs of cubic feet. Of this, we subtract one-third for pillars, and have left 120 lakhs. If we calculate one and a quarter maund of salt for every cubic foot of excavation, we derive a total yield of 150 lakhs of maunds.

Soojewal Mine.

83. The future workings in the Soojewal salt seam will extend in the form of a broad belt, along the north-western margin, and of a square field in the south-west of the present Soojewal Mine. The south-east end of the Soojewal Mine is worked out, and connected with the old Chingwalla Mine, and to the south, the field is partly

MINES, KHEWRAH SALT RANGE.

74. Two kinds of galleries will be made. Horizontal galleries parallel to the strike of the strata, and sloping galleries in the direction of the fall of the strata. We call the former parallel galleries and the latter cross galleries. *Two kinds of galleries intended.*

1. In the Soojewal Mine, we have sloping or cross galleries between the long sides of the oblong pillars 40 feet wide and 40 feet high extending south-east to north-west from the upper to the lower boundary of the explorable salt stratum. The parallel galleries, which are all horizontal and follow the strike of the strata, in straight lines or curves, are to be only 20 feet wide. The pillars being 40 feet long in the slope, and 20 feet wide in the strike, the distance of the parallel galleries from each other must be 40 feet; whilst the distance of the cross galleries from each other is equal to 20 feet. The parallel galleries in Soojewal may be left out partly, or driven after the others as convenient. *Those in the Soojewal mine described.*

2. In the Buggy Mine, in the middle seam, we have pillars in the form of walls extending over the whole width and height of the excavation. Between these pillars are cross galleries 40 feet wide and extending like the pillars over the whole width and height of the mine in this seam. These cross galleries are connected by means of the parallel galleries. These are small drifts going through the pillars only 6 feet wide and 7 feet high. They merely serve to open the large galleries in the beginning and to keep up communication, and serve for transport of salt afterwards. There are four such drifts, one on the floor of each of the four stories into which the mine is divided. The uppermost drift is made first, and worked in advance, through as many cross galleries and pillars as possible. The lower ones are driven afterwards and serve for taking the salt out from the galleries as they are worked down. *Those in Buggy described.*

3. The two small seams of Buggy will only have parallel galleries, one above the other in each seam with a strong arch of salt between them.

4. *Fourth rule.—Systematical excavation of the salt from the top downwards.*

75. In describing the Soojewal and Buggy Mines, it was mentioned that no fixed rule is observed regarding the method of excavation. A certain narrow part called "kuttee" is worked forward into the salt. By the advance of this kuttee, the compact salt mass is first opened out, and the working of the remaining salt bed is facilitated. The remaining salt is worked away in two ways, either by working upwards from the kuttee, known as "Chuth" work, or by working downwards, technically called "Pur" work. These two methods are indiscriminately adopted, according to no fixed rule. Sometimes it is nearly all "Chuth" work, at others nearly all "Pur." In the first case, the kuttee is on the floor of the started chamber, in the second it is on the top. In other cases the kuttee goes through the midst of the chamber, and equal quantities of the remaining salt are taken out, as "Chuth" and "Pur". To establish a regular system, we must abolish one of the two methods, and I recommend that it be the "Chuth" system, which is interesting, but very inconvenient. The miners excavate the salt from below upwards by means of tripods of such a height that they just allow a man to sit between them and the roof. The man cannot work in such

4th rule.—Systematical excavation of salt.

Modes of excavation described.

Abolition of the Chuth system recommended.

a position either with boring tools, or with the pick-axe, as well as he could if standing on the ground. The work on tripods can only be carried on to a limited height of 30 feet, whilst we have proposed chambers 127 feet high. It would therefore be well, as I said above, to abolish "Chuth" work altogether, and only allow the Pur.

Reasons therefor.

Proposed plan of excavation described.

76. If we do that, we must have the kuttee on the top of each started working, which is the plan on which the salt mines on the Continent and in Cheshire are usually worked. A head working, or "kuttee," is driven in advance just below the roof of the workable salt seam, about 7 feet high, or as high as is required to enable a man to walk upright. Behind the advancing head works, the remaining salt is blasted away in steps. This system should be introduced here. All the galleries, as they are proposed for the extraction of salt, should be driven in two periods. In the first period, we have to drive 7 feet of their height as headwork or kuttee, and in the second period, we work out the whole body of the salt, which remains below, as Pur. We would do this in the parallel galleries, and cross galleries of Soojewal, in the long 60 feet high galleries of the two small Buggy seams, and in the 127 feet high galleries of the middle Buggy seam. In the latter this system of working reaches its highest degree of perfection, on account of the great height of the chambers. The Pur in these chambers will be fully 120 feet high, and it is intended to work it in four steps, or stories, of 30 feet each. The head working, or kuttee, of these large chambers is to be made as follows:—we first drive the No. 4 parallel gallery, or narrow communication drift, forward into the salt seam, and in the space which forms a chamber we work a "kuttee" for a length of 40 feet upwards in a sloping direction towards the right. When the kuttee has reached the height of 127 feet, we work forward horizontally towards the south-east, till we have reached the marl seam between the middle and lower Buggy seam. When this is done, the kuttee for the whole large chamber is finished and the Pur can be started. Before, however, we reach so far with one chamber, the kuttee of the second and third chamber, &c., will be started. The Pur of all the galleries is likewise worked down successively, so that that in the first gallery will be worked very deep, whilst in the following galleries it will decrease. As before mentioned the Pur work of the chambers is to be performed in steps of 30 feet each, advancing from the upper seam to the lower seam. We have in our plan two kinds of advancing steps, first, those formed by the Pur of each gallery, and second those formed by the galleries themselves, as they follow each other in a less complete state. Both kinds of steps are represented in the two vertical sections on Map No. III. The former, in the vertical section of Buggy, across the strata, and the latter in the same section of Buggy, parallel to the strike, through the middle seam.

Fresh fields may be opened out, and fresh working space created if necessary.

77. As regards the opening of fresh parts of the salt fields and the creating of fresh working space, we have already stated what should be done in this respect in the large middle Buggy seam. We have seen, that the uppermost drift should be worked far ahead in the salt seam, and from it, new chambers commenced one after the other. As regards the side seams any number of starting points can be got by driving small drifts from the advanced workings of the middle seam through the

worked out by the Mukhad Mine, as before stated. The new salt field will average 1,200 feet long, 150 feet wide, 40 feet high, equal to a solidity of 80 lakhs of cubic feet. Deducting one-fourth for pillars, leaves 60 lakhs of cubic feet, and these at one and a quarter maunds per cubic foot will turn out 75 lakhs of maunds.

84. Some part of the Phurwalla salt seam is on a higher level than the deep workings of Buggy Mine, and may be explored after the construction of a deep level water drain in Buggy. The quantity of salt easily available from this mine may be about 25 lakhs of maunds. *Phurwalla mine.*

85. The total quantity of salt available from the new proposed workings is— *Total quantity of Salt obtainable from the new fields,*

Buggy ...	...	150	Lakhs Maunds.
Soojewal ...	...	75	„ „
Phurwalla ...	...	25	„ „
Altogether	...	250	lakhs of maunds of salt.

This quantity, at the present rate of selling, would last 25 years. For this period of time, the supply is secured, in already known salt seams. What other supplies we shall get after that time, we can only guess. Considering that, as above stated, the quantity which has already been extracted is equal to 300 lakhs maunds, I should take the whole quantity of salt which must yet be available in the salt hill, above the level of the gorge, to be 1,000 lakhs of maunds. The continuation of the salt hill, on the right side of the Khewrah Gorge, the Leenda and Gitealli, may yet contain much more salt than the old hill, according to geological surmise. *sufficient to last for 25 years.*

86. But if we only take 1,000 lakhs for granted, the whole available quantity at Khewrah amounts to 2,000 lakhs, and secures the present supply of the mines for 200 years. Total supply available sufficient to last for 200 years.

Quantity of salt sold at the Mayo Salt Mines during each official year from 1850 *to* 1870, *by W. Matthews, Esq., Deputy Collector, Inland Customs.*

Years.		Maunds of Salt.
1850-51	...	... 4,64,624
1851-52	...	... 3,98,415
1852-53	...	... 5,81,991
1853-54	...	... 6,46,590
1854-55	...	... 7,51,236
1855-56	...	... 7,21,189
1856-57	...	... 6,55,499
1857-58	...	... 6,62,592
1858-59	...	... 7,21,181
1859-60	...	... 7,57,016
1860-61	...	... 9,16,106
1861-62	...	... 7,50,491
1862-63	...	... 7,35,136
1863-64	...	... 8,92,123
1864-65	...	... 8,85,330
1865-66	...	... 8,92,333
1866-67	...	... 9,72,417
1867-68	...	... 9,46,863
1868-69	...	... 9,63,480
1869-70	...	... 11,35,969
20 years.		1,54,50,581 maunds.

The production in 20 years previous to 1870 was therefore very little above 154½ lakhs of maunds.

Cost of the salt after construction of the new tramway and opening out the new workings.

Cost of salt when the new tramway is completed.

	Rs.	A.	P.
As regards the cost of the salt, Government has paid hitherto for its extraction and carriage to the intermediate depôts outside of the mines the amount of	4	0	0
For the carriage thence down to the weighing-house, the merchants pay	0	12	0
The merchants pay also for the carriage of empty bags to the depôts at the mines	0	1·13	0
The total cost of 100 maunds of salt at the weighing-house is therefore	4	13·13	0
After the establishment of the new tramway we shall receive the salt at the loading station per 100 maunds, at...	3	8	0
There is thus henceforth a saving of	1	5·13	0

in the production of every 100 maunds of salt.

V.—Chemical analysis of the salt.

Analyses of Salt.

Statistics of analyses.

Results of Analysis.	I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	X.
Earthy matter ...	Trace	0·12	Trace	Trace	Trace	0·04	1·13	1·10	Trace	1·00
Sulphate of Lime ...	0·28	2·61	0·77	0·69	0·92	0·68	2·65	2·50	0·75	2·50
Sulphate of Magnesia ...	...	2·64	...	...	...	...	1·85	1·00	...	1·50
Chloride of Calcium ...	0·92	...	0·00	0·42	1·16	...	...	...	0·50	...
Chloride of Magnesium ...	0·32	1·76	0·71	0·71	1·34	2·22	1·39	0·83	1·25	1·00
Chloride of Sodium ...	99·45	92·91	94·60	92·84	92·80	91·74	86·54	93·41	93·00	90·00
Water and loss ...	...	...	3·92	5·34	3·78	5·32	6·34	1·16	4·50	4·00
Total ...	100·97	100·04	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·0

From Mr. M. Hickie's Pamphlet on Customs :—

No. I.—Lahore Salt.

No. II.—Lahore Salt.

Analyses made by Cornelius Hickie, Esq., Chemical Analyst, Agra :—

No. III.—Purest white crystallized salt from the Mayo Salt Mines.

No. IV.—White salt as it is sold from depôt at Buggy Mine.

No. V.—Red salt as it is sold from depôt at Soojewal Mine.

No. VI.—Mixed white and red sold as it is sold from Buggy Mine Depôt.

No. VII.—Bad salt which is thrown away as waste from Soojewal Depôt.

No. VIII.—Bad salt which is thrown away as waste from Buggy Depôt.

Average of composition of salt from Mayo Salt Mines.

No. IX.—Average good salt from the Mayo Salt Mines, calculated as average of the analyses III, IV, V and VI.

No. X.—Average bad salt from the Mayo Salt Mines, calculated as average of the analyses VII and VIII.

87. We take No. IX as the fair average composition of the market produce of the Mayo Salt Mines. Accordingly this con-

tains only traces of earthy matter, not more gypsum than refined manufactured salt generally contains, and a moderate quantity of the chlorides of calcium and magnesium. Digest of analyses.

88. Even the waste salt of the Mayo Salt Mines, which is represented by analysis No. X, is still a comparatively pure salt, containing only one per cent. of earthy matter and 5 per cent. of other salts including the sulphate of lime. To prevent mistakes, I must mention that the waste salt in question is not that fine salt which is left in large quantities in the mines, because the traders cannot easily transport it and prefer salt in lumps. The waste salt analysed is bad salt mixed with *gangue* and separated in larger pieces from the good salt at the depôts. It is very remarkable that this sort of waste salt contains sulphate of magnesium, and the good salt, chloride of calcium instead. The very same difference exists in the two samples of Lahore salt Nos. I and II. The first of these samples contains sulphate of lime, chloride of magnesium and chloride of calcium, whilst the second contains sulphate of lime, chloride of magnesium and sulphate of magnesia.

H. WARTH,
Chemical Analyst,
Inland Customs Dept.

SIMLA,
The 1st November 1870.

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Appendix K.

Bhurtpoor Salt.

The Bhurtpoor salt being the only description manufactured in Rajpootana that could be expected to compete successfully with Sambhur, after the completion of the Agra and Jeypoor Railway, I have thought it necessary to enter into some details, as to its out-turn for the past five years, average prices at the works, &c..

2. Appended are several tabular statements which I have compiled from information kindly furnished by Major T. Cadell, v. c., Political Agent for the Eastern States of Rajpootana, and which give, I believe, all the particulars in regard to Bhurtpoor salt, necessary for our purposes.

3. The steady yearly increase in the price of every description of Bhurtpoor salt, is the most noticeable feature in these tables. It is on the *price* at which this salt can be sold that its chance of retaining any permanent hold on our markets, after the Agra and Jeypoor Railway opens, depends, and if the future may be in any way guaged by the past, this chance is small indeed.

4. To enable Bhurtpoor salt to keep its position, not only must the heretofore steady rise in prices be arrested, but a material reduction in those of the past year must be effected. Sambhur salt leaves the works at an uniform rate of 10 annas a maund. When the Sambhur, Bhurtpoor and Agra line is complete, the cost of carriage of Sambhur salt to Agra will only exceed that of Bhurtpoor to the same mart by 3 annas per maund.

5. The average price at the works, of Bhurtpoor salt of all descriptions has, during the past year, been 13 annas per British maund. At this price, therefore, both Sambhur and Bhurtpoor salt would be put at the same price into the Agra market. But neither *Kuteela* nor *Punya* which form the great bulk of the Bhurtpoor exports, can compete with Sambhur unless they can be sold at least 4 annas the maund cheaper than this latter salt. It follows that if Bhurtpoor is to hold its own, its price must fall from Rs. 3-8-6 per pullah at which it has sold throughout Sumbut 1926 (21st September 1869 to 9th September 1870) to Rs. 2-6-9 for the same quantity, a price to which it has never fallen since September 1867.

6. Every thing depends upon the possibility of this reduction. Under the existing system, both of manufacture and management, it seems doubtful whether this is possible, but if the Durbar were to address themselves energetically and *in time* to the task, were to remove the numerous obstructions of which the manufacturers complain, and substitute for their present *share* in sale proceeds, a light duty, it is probable that this *to them* most important branch of national industry might be preserved.

7. There is however too much reason to fear that this will not be done. The construction of the Railway, which will open in sections beginning from Agra, and which will at first give Bhurtpoor salt the advantage of Railway carriage to Agra, without conferring any commensurate advantage on Sambhur, will temporarily greatly stimulate the trade in the former and encourage the belief that the Bhurtpoor trade is sound and healthy, and when a year or two later the rail is opened the whole way to the lake, and Sambhur suddenly takes possession of the market, it will be too late to initiate the fundamental reforms necessary to preserve the Bhurtpoor trade.

A. O. HUME,
Commissioner of Inland Customs.

BHURTPOOR SALT.

Statement showing the produce and sale of salt of all descriptions at the Bhurtpoor works during the past five years.

Year.	Estimated amount of salt in stock at commencement of year.	Amount of salt manufactured during the year.	Amount of salt sold during the year.	Average price per pullah which averages* mds. 4-11¾ British.	Average price per British maund.
	Maunds.	Maunds.	Maunds.	Rs. A. P.	Rs. A. P.
†Sumbut 1922 ... ... 6th September 1865 ... 24th September 1866 ...	1,562,747	1,495,429	1,473,359	2 2 3	0 7 11
Sumbut 1923 ... ... 25th September 1866 ... 13th September 1867 ...	1,539,891	1,142,922	1,447,450	2 2 3	0 7 11
Sumbut 1924 ... ... 14th September 1867 ... 2nd September 1868 ...	1,156,746	1,230,184	1,319,856	2 10 9	0 9
Sumbut 1925 ... ... 3rd September 1868 ... 20th September 1869 ...	991,885	1,444,994	1,344,292	2 11 6	0 10 1
Sumbut 1926 ... ... 21st September 1869 ... 9th September 1870 ...	1,047,303	1,340,404	1,429,321	3 8 6	0 13 2

* *Vide* Separate Memo. on Bhurtpoor weights.
† The Bhurtpoor Sumbut commences on Kwar Buddee 1st.

Statement showing the produce and sale of Punya salt at the Bhurtpoor works during the past five years.

Year.	Estimated amount of salt in stock at commencement of year.	Amount of salt manufactured during the year.	Amount of salt sold during the year.	Average price per pullah which of this salt contains maunds 4-29¼ British.	Average price per British maund.
	Maunds.	Maunds.	Maunds.	Rs. A. P.	Rs. A. P.
Sumbut 1922 ... ... 6th September 1865 ... 24th September 1866 ...	567,958	683,308	726,706	1 10 6	0 5 8
Sumbut 1923 ... ... 25th September 1866 ... 13th September 1867 ...	555,626	462,721	666,127	1 13 9	0 6 4
Sumbut 1924 ... ... 14th September 1867 ... 2nd September 1868 ...	343,276	650,039	567,923	2 6 9	0 8 3
Sumbut 1925 ... ... 3rd September 1868 ... 20th September 1869 ...	446,708	754,812	893,454	2 9 3	0 8 10
Sumbut 1926 ... ... 21st September 1869 ... 9th September 1870 ...	341,346	637,937	694,307	(Details not received.)	

BHURTPOOR SALT.

Statement showing the produce and sale of Kuteela salt at the Bhurtpoor works during the past five years.

YEAR.	Estimated amount of salt in stock at commencement of year.	Amount of salt manufactured during the year.	Amount of salt sold during the year.	Average price per pullah which of this salt contains mds. 4-7/8 British.	Average price per British maund
	Maunds.	Maunds.	Maunds.	Rs. A. P.	Rs. A. P.
Sumbut 1922 ... . 6th September 1865 ... 24th September 1866 ...	968,170	786,921	726,095	2 9 3	0 9 10
Sumbut 1923 .. .. 25th September 1866 .. 13th September 1867 ...	953,836	663,646	763,761	2 5 9	0 9 0
Sumbut 1924 ... ... 14th September 1867 . 2nd September 1868 ...	790,558	559,039	730,529	2 14 0	0 10 11
Sumbut 1925 ... ... 3rd September 1868 ... 20th September 1869 ...	529,727	680,572	437,652	2 15 9	0 11 4
Sumbut 1926 .. .. 21st September 1869 ... 9th September 1870 ...	607,621	685,357	720,897	(Details not received.)	

Statement showing the produce and sale of Mutya salt at the Bhurtpoor works during the past five years.

YEAR.	Estimated amount of salt in stock at commencement of year.	Amount of salt manufactured during the year.	Amount of salt sold during the year.	Average price per pullah which of this salt contains mds. 4 British.	Average price per British maund.
	Maunds.	Maunds.	Maunds.	Rs. A. P.	Rs. A. P.
Sumbut 1922 ... ... 6th September 1865 ... 24th September 1866 ...	26,619	25,191	20,558	3 8 3	0 14 0¾
Sumbut 1923 ... ... 25th September 1866 ... 13th September 1867 ...	30,429	16,555	17,562	3 13 6	0 15 4
Sumbut 1924 ... ... 14th September 1867 ... 2nd September 1868 ...	22,912	21,106	21,101	3 14 9	0 15 9
Sumbut 1925 ... ... 3rd September 1868 .. 20th September 1869 ...	15,450	9,610	13,186	4 2 6	1 0 7
Sumbut 1926 ... ... 21st September 1869 ... 9th September 1870 ...	8,336	17,110	14,018	(Details not received.)	

BHURTPOOR SALT.

Memorandum of the Bhurtpoor Salt weights.

Punya Salt.		Kuteela Salt.	
22 Takkas	= 1 seer.	22 Takkas	= 1 seer.
44 Seers	= 1 maund.	44 Seers	= 1 maund.
5 Maunds or 4 British maunds & 26⅔ seers	= 1 pallah.	4 Maunds 20 seers or 4 British maunds & 7½ seers.	= 1 pallah.

Muttya Salt.

22 Takkas	= 1 seer.
42 Seers	= 1 maund.
4 Maunds 20 seers or 4 British maunds	= 1 pallah.

T. CADELL, *Major*,

Offg. Political Agent, Eastern States, Rajpootana.

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